



RESULT 2  
US-09-361-631-1.

; Sequence 1: Application US/09361631  
; Patent No. 6383778

; GENERAL INFORMATION:

; APPLICANT: Zuker, Charles S.  
; APPLICANT: Adler, Jon Elliot  
; APPLICANT: Lindemeier, Juergen

; APPLICANT: The Regents of the University of California

; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor

; FILE REFERENCE: 02307E-088720US

; CURRENT APPLICATION NUMBER: US/09/361,631

; CURRENT FILING DATE: 1999-07-27

; EARLIER APPLICATION NUMBER: US 60/095,464

; EARLIER FILING DATE: 1998-07-28

; EARLIER APPLICATION NUMBER: US 60/112,747

; EARLIER FILING DATE: 1998-12-17

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO: 1

; LENGTH: 843

; TYPE: PRT

; ORGANISM: Rattus sp.

; FEATURE: G-protein coupled receptor (GPCR) B4 amino

; OTHER INFORMATION: acid sequence

US-09-361-631-1

Query Match 72.1%; Score 3203.5; DB 4; Length 843; Best Local Similarity 70.6%; Preq. No. 6.2e-296; Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4; US-09-361-631-1

Query 1 MGPRAKTICSLFLLIWLAEP--AENSDFYLPGDYLGGFLSLHANMKGIVHANFLQWP 57

1 MGQPRATICSLFLLIWLAEP--AENSDFYLPGDYLGGFLSLHANMKGIVHANFLQWP 57

58 MICKEYEVKVKVGYNLMQAMRPAVEEINDSLLPGVLYGIVYDVCYISNNQPYLYFLAH 117

61 KCNEFTMKVIGYNNLQAMRPAVEEINDSLLPGVLYGIVYDVCYISNNQPYLYFLAH 120

QY 241 LIGQDKSTCTRKRVYVPMOLLEIWKONTFLDQIFPDQODVALHETVQWQDRSNP 300

QY 462 FQSVASVYPLQRQKNIQDISWHTNTTNTMSMSKRCRQSGQKKEPKVGIVHCCBECIDL 521

QY 301 FOSVASYYPLQRQKNIQDISWHTNTTNTMSMSKRCRQSGQKKEPKVGIVHCCBECIDL 359

QY 522 FGTFLNHTEDYEYECOACPNNEWSXQESTSFKRQVLEHEAPTAVALAALGFLSTL 581

Db 360 FGTFLNHTE-----CPNNEWSXQESTSFKRQVLEHEAPTAVALAALGFLSTL 412

QY 582 AIVVIFWRFHQPTPIVSAGGPMCFLMLTLLIVAVMVPUVYGPVKSTCILCROALFPLCF 641

413 AIVVIFWRFHQPTPIVSAGGPMCFLMLTLLIVAVMVPUVYGPVKSTCILCROALFPLCF 472

Db 642 TICTSICIAVSVSQTWCFAKQASRPRAYSWWVYQGPVYMSAFTWKLKIVWIGMLARP 701

Qy 653 TICTSICIAVSVSQTWCFAKQASRPRAYSWWVYQGPVYMSAFTWKLKIVWIGMLARP 669

QY 702 QSHPRTDPPDKITVSCNPYRNLSLNTSLLSLSVGSFAYNGKELPTNNEAKFI 761

Db 533 QSHPRTDPPDKITVSCNPYRNLSLNTSLLSLSVGSFAYNGKELPTNNEAKFI 592

QY 762 TLSMTPYFTSVSLSCTPMSAVSGVLTIVLVTWLNLAISLGGTGPCKYMLFYPERN 821

Db 593 TLSMTPYFTSVSLSCTPMSAVSGVLTIVLVTWLNLAISLGGTGPCKYMLFYPERN 652

Qy 822 TPAYENSMICQYTMRD 838

Db 653 TPAYENSMICQYTMRD 669

QY 118 EDNLIPIQDYSVNTSRVAVIGDNTSVMVTANFLSLPUQOTSAISDELDRKRF 177

Db 121 DDDLPLIKQDYSQMPHIVAVIGDNTSVAITVNSILSHFLPQITSAISDKLDRKRF 180

QY 178 PALLRTTPSADHRYEAMVOLMLAIPRWNNTIVLVSDDTGRDNQOLGERVAR-RDICTAF 236

Db 181 PSMRTRVPSATHTEAMVOLMVRQWNWVWLSDDYGRENHSRLTKSDICAF 240

QY 237 QETLPLTQPNONMITSSEERORLVTVDKQSTARVUVVSPDPLTYHFNENVRQNPFGA 296

Db 241 QEVLPIDESQVMSBEEQRQDNLNDKURRTSARVVVFSPELSLYSPFPEVLRWNFTGF 300

QY 297 WVIASESMWIDPVHLNTELGHTGFLGITOQVPIFSERFEWGQGPAPPRLRSQS 356

301 WVIASESMWIDPVHLNTELGHTGFLGITOQVSIQPSQFVRDRKPGVYPNTLUR 360

QY 357 YTCNQBCDNCLNATLSFNTLRSGERWVYVSVSAYVAVAHALHSLLGDKSTCTKRVV 416

Db 361 TTCNQDCACLNATKSFNNTLRSGERWVYVSVSAYVAVAHJRLGCNRVCTKQCV 420

QY 417 PWOLLEETWKNFNTFLDHOIFFPQDGYVHLHISVOWMDSRNPQFQVSYPLQRQK 476

Db 421 PWOLLEETWKNFNTFLGKRLFFQGDPMFLDQIOWMDSRNPQFQVSYPLQRQK 480

QY 477 NIQDISWHTNTTNTMSMSKRCRQSGQKKEPKVGIVHCCFECIDCLPGFLNHTEDYEQ 536

Db 481 YINNSWYTPNNTVPUVMSKSCSKSGQKMSVSLHPCCECLCMRGTYNRSADEFCN 540

QY 537 ACPNNEWSXQESTSFKRQVLEHEAPTAVALAALGFLSTLIVWIGMLARP 596

Db 541 SCGSMWWSKNDITCQFQRPTFLEHEPTIVVAVLAALGFLSTLIVWIGMLARP 600

QY 597 RSAGGPMCFMLTLLIVAVMVPUVYGPVKSTCILCRAFLPCTCISCTICAVSFOIV 656

Db 601 RSAGGPMCFMLYPLLLAEGMNPVYVGPVKSTCILCRAFLPCTCISCTICAVSFOIV 660

QY 657 CAFKMASRPRAYSWWVYQGPVYMSAFTWKLKIVWIGMLARPQSP--RTPDDEPKI 714

Db 661 CVFKMARRLPSAFTWMLRPHGPVYVGPVKSTCILCRAFLPCTCISCTICAVSFOIV 719

QY 715 TISCNPYRNLSLNTSLLSLSVGSFAYNGKELPTNNEAKFIITLSMTPYPTSSV 774

Db 720 MILSCHPYNTRNLGFLNTSLLSLSVGSFAYNGKELPTNNEAKFIITLSMTPYPTSSV 779

QY 775 LCTPMSAVSGVLTIVLVTWLNLAISLGGTGPCKYMLFYPERNTPAYENSMICQY 834

Db 780 LCTPMSAVSGVLTIVLVTWLNLAISLGGTGPCKYMLFYPERNTPAYENSMICQY 839

QY 835 MRR 837

Db 840 MRR 842

RESULT 3  
US-09-361-631-2

; Sequence 2: Application US/09361631

; Patent No. 6383778

; GENERAL INFORMATION:

; APPLICANT: Zuker, Charles S.

; APPLICANT: Adler, Jon Elliot

; APPLICANT: Lindemeier, Juergen

; APPLICANT: The Regents of the University of California

; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor

; FILE REFERENCE: 02307E-088720US

; CURRENT FILING DATE: 1999-07-27

; EARLIER APPLICATION NUMBER: US 60/095,464

; EARLIER FILING DATE: 1998-07-28

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 2  
LENGTH: 843  
TYPE: PRT  
ORGANISM: Mus sp.  
FEATURE:  
OTHER INFORMATION: mouse G-protein coupled receptor (GPCR) B4 amino acid sequence  
US-09-361-631-2

Query Match 70.9%; Score 3151.5; DB 4; Length 843;  
Best Local Similarity 68.9%; Pred. No. 5.5e-291; Mismatches 142; Indels 7; Gaps 4;  
Matches 581; Conservative 113; Mismatches 142; Indels 7; Gaps 4;  
Quy 1 MGRPAKTCISLFLWVLAEP---AEASDFYLPGDYLIGGFLPSLHANMKGIVHNLFLQVP 57  
Db 1 MGPQARTHLFLHLHALPKVPLVGNSDFHLAGDYLGGFLTHANKVSHLSYLQVP 60

Quy 58 MCKEYEVKVLGILMOMRFAVEEINNDSSLPGVLYEVVDCVTSNNNQVYFLAH 117  
Db 61 KNEYNNMKVLAGTGNLQMAMRFAVEEINNCSSLPGVLYEVVDCVTSNNNQVYFLAH 120

Quy 118 EDNLPLPQBDNSVNSRVAVGPDSNSVMVANLFLPQITYSAISDELKDVKRF 177  
Db 121 IDPFLPKDQSYRQPVQAVGRDSEASATVNSLSPYFVQVTSYAIKDLQKRF 180

Quy 178 PALLRTPSADHVEAMVQMLHFRPNWIVLVSSTYGRNGQLGGERVARR-DICIAF 236  
Db 181 PAMLRITVPSATVHIEANVQMLHFRPNWIVLVSDDYGRGENSHLSSQRLNTGDCIAF 240

Quy 237 QETLPLTQPNQMTSERORQVLTIVQLOGQSTARVUVVQESDLTUYHFRPNVLRQFTGA 296  
Db 241 QEVLPVPEPNQAVRPEBQDQDNLQDNLQKRTSARVUVVTSFBSLNUFRRVLRWNTGF 300

Quy 297 WIASSWAWDVLHNLTELGHLGTEGITSQSVPTPGSPFREMGQAGPPLSRTSQ 356  
Db 301 WIASSWAWDVLHNLTELGHLGTEGITSQSVPTPGSPFREMGQAGPPLSRTSQ 356

Quy 357 YTCNOECDNCNCLNATLSENTIRLGLSERVYVSYATVAVAHLSHGCDSTCTKRVV 416  
Db 361 TICNODODACGNITESFNNVNLMSLGERVYVSYATVAVAHLSHGCDSTCTKRVV 420

Quy 417 PWQLELRWKWNTLADHQIFPQDVALLEIIVQWQDSQNPOSVSYVPLQLK 476  
Db 421 PWQLELRWKWNTLADHQIFPQDVALLEIIVQWQDSQNPOSVSYVPLQLK 480

Quy 477 NQDISHWHTVNTIPMSMCSRQCSQGOKKVGIVHCCPFDLCLGTFNHTEDBEYEQ 536  
Db 481 YISNNSWYTPNTVTPSMCSSCQPSOMKIGLHCFCEDVCPDTYVRSBENCL 540

Quy 537 ACPNNNEWSYQSBTSCEPKRQLYPLEHAPTAVALLAALGFLSTLAILVFWRHFOPTV 596  
Db 541 SCPGSMWSYKONIACFKRLAFLPWEHEVPTVWTLALGFLSTLAILVFWRHFOPTV 600

Quy 597 RSAGGNCMFLMLTLLIVAVMVNPVYQGPKPSTCIGQALPLCFITCISLAWSFQIV 656  
Db 601 RSAGGNCMFLMLVPLLAFLGKPVVYQGPPTVSCFCRQAFPTVCFSCVLSCTVRSFQIV 660

Quy 657 CAPKMASRPPAKSYWRYQGPVYVSAFITLKMNTVWIGMLARPOSHP--RTDPDPK 714  
Db 661 CYFKEMLRPLPAGFMYRHPYVYFVAFITVKAVALVAGNMLA-TTNPGRRTDPK 719

Quy 661 CYFKEMLRPLPAGFMYRHPYVYFVAFITVKAVALVAGNMLA-TTNPGRRTDPK 719  
Db 67 IGYNL---NQAMRFAVEEINNDSSLPGVLYEVVDCV-YISNNNQVYFLAH-HED 119  
Db 68 6 CCLLILIFTWNTAAYGPNORAKKEDDITLGGFLPINF--GVAAKD--QPLKSRPESVEC 60

Quy 120 NLLPQOB--DYSNTISRVVAVGPDSNSVMVANFLSLFLPQITYSAISDELKDVKRF 177  
Db 69 121 DSNLUDFCNCSEHIFSTIAVGATGSGVSTAVANLGLQYIPOVSYASRSLNSRNQF 180

Quy 715 TIVSCNPNYRSLFLNTSLDILSUVGSPFAYNGKEPLTNTNEAKRITLSTMTPYFSSVS 774  
Db 720 720 IILSCPNYRGLFLNTSMDLISUVGSPFAYNGKEPLTNTNEAKRITLSTMTPFSSSIS 779

Quy 775 ICLTPEMAYSGVIVTIVLTVTLAISLGYFGPKCMIYFPERNTPAFNSMQGTY 834  
Db 780 ICLTPEMAYSGVIVTIVLTVTLAISLGYFGPKCMIYFPERNTPAFNSMQGTY 834  
Quy 835 MRR 837  
Db 840 MRR 842

RESULT 4  
US-09-134-513-2  
Sequence 2, Application US/09134513  
Patent No. 6210964  
GENERAL INFORMATION:  
APPLICANT: Brown, Edward M.  
APPLICANT: Diaz, Ruben  
APPLICANT: Bai, Mei  
APPLICANT: Quint, Stephen J.  
TITLE OF INVENTION: The Avian Extracellular Calcium-Sensing Receptor  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESS: Vision & Elkins L.L.P.  
STREET: 1455 Pennsylvania Avenue, N. W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.  
ZIP: 20004-1008  
COMPUTER READABLE FORM:  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/M-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/134,513  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sanzo, Michael A.  
REGISTRATION NUMBER: 36,912  
REFERENCE/DOCKET NUMBER: BRI331/13003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)639-5885  
TELEFAX: (202)639-5504  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1,059 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
TOPOLOGY: not relevant  
MOLECULE TYPE: protein  
HYPOTHETICAL: NO  
US-09-134-513-2

Query Match 24.9%; Score 1107; DB 3; Length 1059;  
Best Local Similarity 31.9%; Pred. No. 4.7e-96; Mismatches 354; Indels 104; Gaps 24;  
Matches 284; Conservative 148; Mismatches 354; Indels 104; Gaps 24;

Quy 9 CSLFLFL--WLAEPAEPAENSFLPFLPDLGFLGFLSHANMKGIVHNLFLQVPMCKEYKV 66  
Db 61 IRYNFRGFRMIQAMFAIEREINNSFLPLNPLNITGLGRFDCTNTSKALETLSFQANKI 120

Quy 67 IGYNL---NQAMRFAVEEINNDSSLPGVLYEVVDCV-YISNNNQVYFLAH-HED 119  
Db 68 6 CCLLILIFTWNTAAYGPNORAKKEDDITLGGFLPINF--GVAAKD--QPLKSRPESVEC 60

Quy 120 NLLPQOB--DYSNTISRVVAVGPDSNSVMVANFLSLFLPQITYSAISDELKDVKRF 177  
Db 69 121 DSNLUDFCNCSEHIFSTIAVGATGSGVSTAVANLGLQYIPOVSYASRSLNSRNQF 180

Quy 178 PALLRTPSADHVEAMVQMLHFRPNWIVLVSSTYGRNGQLGGERVARRDICIAFO 237  
Db 181 KSFRLRTIPNDBQATAMADIEYFRMNWGTIAADDYGRPGIEKFRESEAERDICIDRS 240

Quy 238 ETLPLTQPNQMTSERORQVLTIVQLOGQSTARVUVVFSPLTLYHFFNEVLQFTGAV 297  
Db 241 ELI---SQQSDEEBIQQVVEI---QNSTARVUVFSSGPDBPLIKEIVRNITGKI 292

Quy 298 WIASSWAWDVLHNLTELGHLGTEGITSQSVPTPGSPFREMGQAGPPLSRTSQY 357  
Db 293 WLASEWASSLIAMPEPFTRVIGSTIGFALKAGQIPGFREBLO--KVHPKKSANGFAK 349

APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/411,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,319  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/034,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,431  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/005  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 7:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1,078 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-405-588-7  
 Query Match 24.6%; Score 1994; DB 1; Length 1078;  
 Best Local Similarity 31.5%; Pred. No. 8.4e-95;  
 Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;  
 Db 8 WILLLWHTWHTSAVGPDQRAQKKGDDITAGLFPIH--GVAAKD--QDLKSRPESVCEIR 62  
 QY 69 YNL----MQAMRAVEEINNDSSLPSYLLGIVINDYC-YISNNVQPVLYFLA-HEONL 121  
 Db 63 YNFRGPRMIQAMTAIEEINNSPALLPNULTGVRIFDTCNTVSKALEATLSEVAONKIDS 122  
 QY 122 LP1Q8--DYSNYISRVVAVTGPONSESVNTVANFLSLTLLPQITYSATSDELDKVRTPA 179  
 Db 123 LNUDBFCNCSEHIFTSTIAVAGATSGSGVATAVANLGLYIYIQPSVASSRSLNSNKNQKRS 182  
 QY 180 LLRTPSPADHVBANVQMLHFRNWVITVLSSTDYGDNGQOLGERVARRDCIAFBT 239  
 Db 183 FLRTIPNDEHQATAMADIEYFRWNVGTAADDYGRGPGEKPREEARDICIDFSEBL 242  
 QY 240 LPTIQPNQMTSEERQRVITVQKLOQSTARVUVFSDLTLYHFFENVLQRTGAWMI 299  
 Db 243 I----SOYSDDEEIQHUVET--QNSTAKVTVFSSGPDLPLIKEIVRRNITGKWL 294  
 QY 300 ASEWAIDVNLNTELGHLGTFGLITQSVPVPGFSEF-----REWGPQ 344  
 Db 295 ASEWAASSLAMQYFHVGUTGTFGALKAGQPGFRFLKKVHPRKSVHNGFAKEFEE 354  
 QY 345 A-----GPPPLRSRSQSYONQCDNCINATSFNTLRLSGE----- 382  
 Db 355 TPNCHLQEGAKGKGPLPVDTLRLGH--EESGDRFNSSTAFRPL--CTGDBENISSVETPYID 410  
 QY 383 ----RVVVSYSVAVAHALHSLGC-----DISTCTKRVVYPMQLEBIMKONT 430  
 Db 411 YTHLRISAVNVYLVAVTIAHALOYTCI,PGRLGFTNGSCADIKKVEAVQVLKHLHIFT 470  
 QY 431 -LLDHQIFPQGDVALHEIVQWDRSONP--FOSVASYPL---QROLKNIODIS 482  
 Db 471 NNMGEQVTFDECQDLYGVYISINWHLSPDGSTVFKF-GYNNVYAKGERLFINKEIL 529  
 QY 483 WHTVNTIPMSMCSSKRCGQKKKPV-GIHVCCFBCTIDCLPGTFLNHTDEYECACPN 541

RESULT 5

US-08-405-588-7

Sequence 7, Application US/08405588

GENERAL INFORMATION:

APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: Forrest H. Fuller  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTBO

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/405,588  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIORITY APPLICATION DATA:  
 PRIORITY APPLICATION DATA: including application  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994





## GENERAL INFORMATION

STATE: California  
COUNTRY: USA  
ZIP: 90071

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQ

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/353,784  
FILING DATE: 9 December, 1994  
CLASSIFICATION: 514

PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 8

APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827

FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 22 October, 1993

APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127

FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992

APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451

FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.

REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 209/069

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEX: 67-3510

SEQUENCE CHARACTERISTICS:  
TOPOLOGY: linear  
LENGTH: 1078 amino acids

MOLECULE TYPE: protein

US-08-353-784-7

Query Match 24.6%; Score 1094; DB 3; Length 1078;  
Best local similarity 31.5%; Pred. No. 8.4e-95;  
Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

QY 16 WLVLAEPAEENSDFYLP-----GDTLGGLFLSHANMKGIVHVLNFLQVPMCKEVEKVIG  
Db 8 WLVLAALWHRISAYGDQRAOKKGDTLGGPPIH--GKAOKD--QDLKSRPESVCEIR 62

QY 69 YNL----MOMRPAVEETINNDSSLPGVLYEVDC-YISNNQVPLYFLA-HEDNL  
Db 63 YNFRGFRFRWLMQAMIFAEETINSPALLPNLTIGYRIFTDTCNTVSKALEATISFVAQNKIDS 122

QY 122 LPIQE--DYSNYISRVAVIYPDNDSESVWVANFLSLFLPQITYSALSDELDKVRFFA 179

Db 123 LNLDBFCNCSEHILSTIAVUGATSGGVSTAVANLGLFYIPQSYASSRLSNQNQFKS 182

QY 180 LRLTPPSADHVEANVOLMHLHRMNVIVVVSDDYGRDNGQLGERRQVARRDIAFOF 239

Db 183 FLRTIPDNDEHQATAMADIEYFRMNWVGITIADDYGRGQIEKFRREABERDIDFSL 242

QY 240 LPTLQPNQNTSEBQRVLYTVDKQLOQSTARVVVFSPDLYHFNENVRQNTGAVWI 299

Db 243 I-----SQSDDEEEIOHVVWVVI--ONSTAKVIVVFSGPDEPLEPLIKEVVRNITGKWL 294

QY 300 ASEAWAIDPVNLTELGHITFGLITIQSVPIQSEF-----REWGQ 344

Db 295 ASEWASSLIAMRQYFHVGUGTGFALKAGQ1PGKFEEFLKVKHPRKSVHNGPAKEFKEE 354

QY 345 A-----GPRPLSLTSQSYTNCNODCDNCLNATSFNTLRLSGB----- 382

Db 355 TPNCHLQSEGAKGKLPVDTFLRGH--EESDRFSNSSTAFLRPL--CTGDBNISSVETPYID 410

QY 383 ----RUVVSVSAYVAVHALMSLGC-----DISTCTRUVVWQVQOLLBETWKONT 430

Db 411 YTHLURISTKVNLYAVSIAHALDQYTCPLGRGLFTNGSCADTRKVEAWQVHLRHLNT 470

QY 431 -LLDHQINPQGDVALHLBIVQWQDRSQN--FOSVASYPL---QRLKNIQD 482

Db 471 NNMGEQVTFDECQDLVGYNSINWHLSPEDGSTVFKV-GYNNVYAKKGKJFFINECKIL 529

QY 483 WHTVNTTPMSMSKRCOSGQKPKV-GHVCFCPECTDCLPGTFLNHNDEYBVCQACPN 541

Db 530 WSGFSREVPPNSCSRDCLAGTRKGJIEBGPCTCPFCVCPDGEYSDT-DASACNKCFDD 588

QY 542 EWSQSESCFKQVLFEMHEPTIAVALLAALGFLPLSTLATVIFRRHQFQPIVSSAGG 601

Db 589 FWSNENHTSCTAKEBIEFLSWTEPFGIAFLTAVFINGTFLVGLVGFKFRNTPIVKANR 648

QY 602 PMCLMLTLLVAYMVVPTVNGPKVSTCLCROALPFLCFTCISCIASCIAVRSQIVCA 659

Db 649 ELSVYLLSLSLCCPSSFFIGRPQDMCRLQKQPAFGSFLVLCISCLVLUKNTVRLVFLFEE 708

QY 660 KMASRFPSPAYSYWVYQGYPSMAFTVTLKWTWVIGNLAROSHSPRTPDPPKITVSC 719

Db 709 KIPTSFHKR--WWGLNQFLYFLCFTPMQIVCIVVWYATPSSYRNQELDEBLIFITC 765

QY 720 NPYNRLSILNTSLDLSUVGSFPAVNGKEPLTPNMYEAKFTLWMYFYSVSVLCTP 779

Db 766 HEGSILMAGFLIGTYCLAAICFFFAFRSRLKUNFENKAFTFSMLIFIWIS--FI 822

QY 780 SAYSGVLUVIVDLYVUNLATSGLG---YGPCKMILYPERNT 822

Db 823 PAYASTYQKFKVFS-AVEVIAILASFGLACIFENKIVIILFKPSRNT 868

RESULT 10  
US 08-484-719B-7  
; Sequence 7, Application US/08484719B  
; Patent No. 603103  
GENERAL INFORMATION:  
APPLICANT: Edward F. Nemeth, Edward M.  
APPLICANT: Brown, Steven C. Hobert,  
APPLICANT: Bradford C. Van Wagenen,  
APPLICANT: Manual F. Balandrin,  
APPLICANT: Forrest H. Fuller, Eric G.  
APPLICANT: Damar, Scott T. Mae  
APPLICANT: Bradford C. Van Wagenen,  
APPLICANT: Manual F. Balandrin,  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
NUMBER OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
CITY: 633 West Fifth Street  
STATE: Los Angeles  
COUNTRY: USA  
ZIP: 90071

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
OPERATING SYSTEM: MS Word  
SOFTWARE: FASTSEQ for Windows Version 3.0

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,719  
FILING DATE: 7 June, 1995  
CLASSIFICATION: 514

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/353,784

FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Douglas C. Murdock  
 REGISTRATION NUMBER: 37,549  
 REFERENCE/DOCKET NUMBER: U.S. 07/749,451  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510

INFORMATION FOR SEQ ID NO: 7:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1078 amino acids  
 TYPE: amino acid  
 STRANDBNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 ; US-08-719B-7

Query Match

Best Local Similarity 24.6%; Score 1094; DB 3; Length 1078;  
 Matches 279; Conservative 31.5%; Pred. No. 8.4e-95; Gaps 26;  
 Mismatches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

Qy 16 WYLAEPAEENPSYFLP-----GDPYLGGLGSILHANNKGTVLQVPMCKEVEKVIG

Db 8 WYLALLTWHTSAYGPQDQRAQKGKDIIGGLPPIHF--GVAKD--QDLKSRPESVECIR

Qy 69 YNLL---MQAMRFAVEBENNDSLIPQVGLQYEVIDVC-YISNNVQPVLYFLA-HEDNL

Db 63 YNFRGERWLQWMTAEFEEINNSPAPNLQYRIFTDTCNWVSKALEATLSFVAQNKIDS

Qy 122 IPIQE--DYSVNVISRVAVIGEDPNSSESVMTWANFLSFLPLQITVSAISDELDKVRFP

Db 123 IALDEFNCSEHPSHIPSTIAVVGATGSGVSTAVANLGLFYIPQVSTASSRSLNSKQFKS

Qy 180 IIRTTSADHVEAMYVOLMLPFRMNTIVIIVSSPTYGRDNGQOLGERVARRDICAFQET

Db 183 FLRTIPINDEHOTAMADIEYFRPNWVGTIAADDYGRPGIEKFREAEERDICDFSEL

Qy 240 LPTLQPNQNMTSEEROLVLTVDKLOQSTARVVVFTSPDLTLHFFNEVLQNFQAVWI

Db 243 I----SOYSEEEIQUHVEVIT--ONSTAVKIVWESGPPLPEPLPLKVERTNTGKWL

Qy 300 ASESWAIDPVTWNLTELGLHGFLGLITIQSVPIGSEF-----RBWGQ

Db 295 ASEAWASSSLIAMPQFHVVGSGTIGFALKAQQIPGFREFLKKVHPRKSVHNGFAKEFWEE

Qy 345 A-----GPPPLSRTSOSYTCMOCDCDCLNATLSENTLRLSGE-----

Db 355 TPNCHLQEGAKGKPLPVDTFLRKH--EBSGDRFSNSSTAFLPL--CTGDENTISSVTPYID

Qy 383 ---RUVSVSVAYAVAHALHSLLGC-----DKSTCTKRVVPMOLLEBWKUNFT

Db 411 YTHLRISYNVYLVAVSYTAHADQIVTCLPGRGLFTNGSCADIKKVEAWQVNLKHLNFT

Qy 431 LLDHOLFFDDQGDVALHEVQWQMDRSQNP--FOSVASYYPL----OPQLRNQDIS

Db 471 NNMGEQVTFDRCGDLVQNYSTINWHLSPEOSIVPKEV-GYVNVYAKKGRLFINEKIL

529

RESULT 11  
 US-08-484-159-7  
 ; Sequence 7, Application US/08484159  
 ; Patent No. 6313146  
 GENERAL INFORMATION:  
 APPLICANT: Bradford C. Van Wagenen  
 APPLICANT: Manuel F. Balandrin  
 APPLICANT: Eric G. Del Mar  
 APPLICANT: Edward F. Nemeth  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071

COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484,159  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 PRIOR APPLICATION DATA: described below: 9  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992

Qy 483 WHTVNNTIPMSMCNSKRCQSGOKKDV-GIRVCCFCRCDLCPGFLNHTEDBEYCOACPN 541  
 Db 530 WSGFSRVEPPNSNCSDLCLACTRKGJIEGBTCCFCVECDGEYSDET-DASACNKCPD 588  
 Qy 542 EWSYOSSETSEPKROLVFLMHEAPTAVALAALGFLSTAILVFWRHQFTPTVRSAG 601  
 Db 589 FWSNENHTSCLAKEIEFLSWEPEFGIAFLTAVFLGVFIKFERNTPVKAATR 648  
 Qy 602 PMCFIMLTLILVAYMVVPGPVKSTCILCROQALFLPLCTICSCIATRSQVLCFAF-- 659  
 Db 649 ELSYUFLFSUCCFSSLFITGEQDWTBLRQPRFGISSTVLCSCILVTRNVLVFEA 708  
 Qy 660 KMASRTPRAYSWVRYQPVMSAFITVLKVNIVVIGMLARPOSHPRTOPDDPKTIVSC 719  
 Db 709 KIPTSFHRK--WWGILNQLQFLVFLCTFMQIVCIVWLVAPPSSYRNQBLEDEIIFTC 765  
 Qy 720 NPNYNLSNLLNTSLLLSLSTVGFSFAYMGKELPTNNEAKFITSMTFYTSSVLCFTM 779  
 Db 766 HEGSILMAGFLIGYTCILAAICFFAFKSKRKPENFNEAKFITSMLIFFIWIS--FI 822  
 Qy 780 SAYSGVLUVTIDLTVNLALISG--YFGPKCYMILFYPERNT 822  
 Db 823 PAVASYTGKEVS-ATEVIALAASIGLACIFENKYYILFKPSRNT 868

APPLICATION NUMBER: U.S. 07/834, 044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749, 451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 36,179  
 REFERENCE/DOCKET NUMBER: 214/101  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 7:  
 LENGTH: 1078 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-484-159-7

Query Match 24.6%; Score 1094; DB 4; Length 1078;  
 Best Local Similarity 31.5%; Pred. No. 8.4e-95; Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;  
 Qy 16 WYLARPAENSDFYL P-----GDLGGESLHANMGVWHNLTLQVPMCKEFEVKIG 68  
 8 WYLALTWTWHTSAYGPDORAKRGDTIIGGLPFIH--GVAKD--QDLKSRPESVECIR 62  
 Qy 69 YNL----MQRFAVEEINNDSSLUPGVLYGEIVDVC-YISNNVQPVYLA-HEDNL 121  
 63 YNFRERWLMQWIFAEIEEINSPLLNPNTLGYRIFDTCTMVTSKALEATISFVAKNKTIS 122  
 122 IPIQS--DYSNYISRVAVIGPDNSBSVMTWANFLSFLFLPQITVSAISDELRDKVRFPA 179  
 Qy 123 LNLDEFCNCSEHPISTIAVWQATGSGVSTAVANLIGFLYIIFQVSIASSRLSNNQFKS 182  
 Qy 180 LURTPSDADHIVEAMVQMLHFRMMWILUVVSSDTPYGRDGKQQLGERVARBDICAFQET 239  
 Db 183 FLRTTIPNDHEATAMADIEHADDYGRPGTEKFRBEEARDICIDFSEL 242  
 Qy 240 LPLTQPNQNMMTSEEROLVLTIVDKLQOSTARVVVSPDPLTLYHFEVNEVLRQNFIGAVI 299  
 Qy 243 I-----SQVDEELQOHVSEI--QNSTAVKIVWVFSSGDLDEPLKETIVRNTGKWL 294  
 Db 300 ASEWALDIPVHNLTBLIGHGTFGLGTTQSVPINGSEF-----REWGQ 344  
 Qy 295 ASEMAWASSLILAMPQFHVUGGTIGFALKKAGQIPGPREFLKVKHPRKSYHNGFAKEFWEE 354  
 Qy 345 A-----GPPPLSRTQSQSYTNQECNCQNCLNTSEWNTLRSGE-----382  
 Db 355 TFNCHLQEGAKGKPLPVDFLGH--BESGDRFSNSTAFLR--CTGDENIJSVTPYID 410  
 Qy 383 ---RIVYSTISAVAHALHSLLGC-----DKSTCTKRVVTPWOLLEIWKUNFT 430  
 Db 411 YTHLRSYNTVYLAWSIAHALQDITVCLPERRGLFTNGSCADIKYKEAWQVLTKHRRHLNT 470  
 Qy 431 -LLDHOIFPDDOGDVALHETVQWQMDRSONP-FOSVASYPL---QRQLKNIQDIS 482  
 Db 471 NNMGEQVTFDCGDLVGNYSIINWHLSPEDGSIVFKEV-GYINVYAKKGERLFINEEKIL 529  
 Qy 483 WHTVNNTIPMSMCISKRCQSGKKKKPV-GIVVCCFCIDCIFGTENHTDEYEQACPNN 541  
 Db 530 WSGFSREVPRNCNSRUDCLAGTRKGTLIEGEPCTCFCBECVCPGEYSDET-DASACNCKPDD 588  
 Qy 542 EWSYQSETSPKRQLVPLLEMHEAPTIAVALLAALGLSTLALVLFWRHRQPTIVSAGG 601  
 Db 589 FWSNENHTSCLAKELEFLSWTEPFGIAFLTAFLVFLGPIKFRNTPIVKATNR 648  
 Qy 602 FMCFLMLTLLTAVMTPVYVGPVKVSTCLCQLAFLPLCFTCITCISIAVRSQTYCAF-- 659  
 Db 649 ELSYKLLFLSLLCCFSSLFFGEQPDWTCKLRQPAFGLCFLCILVKNRLVLFEA 708  
 Qy 660 KMASRFPRAVSYWVRYQGPVYMSAFITVLUKVIVVIGMLARPQSHPRTDPPDKITIVSC 719

RESULT 12  
 US-09-162-021B-2  
 Sequence 2, Application US/09162021B  
 patent No. 6337391  
 GENERAL INFORMATION:  
 APPLICANT: H. William Harris  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 TITLE OF INVENTION: Polycation-Sensing Receptor in Aquatic  
 TITLE OF INVENTION: Species and Methods of Use Thereof  
 FILE REFERENCE: 2856.1001-007  
 CURRENT APPLICATION NUMBER: US/09/162.021B  
 CURRENT FILING DATE: 1998-09-28  
 PRIOR APPLICATION NUMBER: PCT/US97/05031  
 PRIOR FILING DATE: 1997-03-27  
 PRIOR APPLICATION NUMBER: 08/622, 738  
 PRIOR FILING DATE: 1996-03-27  
 NUMBER OF SEQ ID NOS: 19  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 2  
 LENGTH: 1027  
 TYPE: PRT  
 ORGANISM: squalus acanthias  
 US-09-162-021B-2

Query Match 24.6%; Score 1092.5; DB 4; Length 1027;  
 Best Local Similarity 31.0%; Pred. No. 1.1e-94; Matches 277; Conservative 162; Mismatches 360; Indels 95; Gaps 25;  
 Qy 5 AKTICSLFFLWVLAEPAEINSDFYL P-----GDLGGFLSLHANM--KGTVHLNPLQ 55  
 2 AQLHQCOLLFLGFTLQ-SIVNSGYGPNORAQKGDIIGGLPFIHFGWAKOOLKSRP 60  
 Db 56 VPMKKEYEYKVGIVNLMRMAVEEINNDSSLUPGVLYGEIVDVC-YISNNVQPVYF 114  
 Qy 59 A-----GPPPLSRTQSQSYTNQECNCQNCLNTSEWNTLRSGE-----118  
 Db 61 ATKCIRYNT--GRWLQAMIAFEEBINSMTLPLNITLGYRIFDTCTMVTSKALEATISF 118  
 Qy 115 LA-HEDNLPIQE-DYSNYISRVAVIGPDNSBSVMTWANFLSFLPQITVSAISDEL 171  
 Db 119 VAQNKIDSINLDEFCNCSDHIPSITAVVAGTAGSGGISTAVANLIGFLYIPOVSYASSRL 178  
 Qy 172 RDKVTFPALLRTPSADHIVEAMVQMLHFRWWMIVVSSDTYGRDNQQLGERVABRD 231  
 Db 179 SNKQBYKAFLRTIPNDEQATAMAEISHQMWNGTIAADDYGRPCIDKFRREEAVGRD 238  
 Qy 232 ICIAFOETUPTLQPNMMSSEEROLVLTIVDKLQOSTARVVVSPDPLTLYHFEVNEVLRQ 291  
 Db 239 ICIDPSEMI-----SQYTT-----QKLETFADIVONSSAKVIVVFSNGDLEPLQETVRR 290  
 Qy 292 NFTGAVWIAESWALDIPVHNLTBLIGHGTFGLGTTQSVPINGSEF-----340  
 Db 291 NITDRIWLAESWASSLILAKPEVHVUGGTGFLRAGRIGCFLKELKEVHPSRSSD 350  
 Qy 341 -----W-----GPOA-GPPPLSRTQSQSYTNQECNCQNCLNT 370  
 Db 351 FVKEFWETPNCYTFTEKUTQKNSKVSHGPAGQDGSKAGNSRRTAIRHPCGEENIT 410  
 Qy 371 LSFTNITLRSURGERVYVSYVSAVAVAHALHSLLGCST-----CTK-RVYWPWOL 422  
 Db 411 SVETPYLQDTHLRSYNTVYLAWSIAHALQDICKPSGTFANGSCADIKYKEAWOLN 470



Db 642 IVKATNRELSEYLULSLLCFFSSUFFIGRPPQDMTCRLRPPAFGFSVULCISCLVKTNR 701  
 Qy 655 IVCAP--KMASRPRPRAVSYWVYQGPVYVSMAPITVLUVWVIGMLARPOSHPRDPPD 712  
 Db 702 VLLVFEAKIPSFHRK--WWGLNLQFLVFLCTFMQILICIWLYTAPPSYRNHELD 758  
 Qy 713 KITVSCNPYRNSLFLNTSL--DILSVVGFSPAVMGKELPTNNEAKFTLSMVF 769  
 Db 759 EIPITC--HEGSLMALGSLIGYCTCLAAICFFAFSKRKLPEFNNEAKFTLSMVF 815  
 Qy 770 TSSVSLCTFMSAYSGLVLTIVLVLVNLALISLG--YFGPKCIMILFPERNT 822  
 Db 816 IIVWIS--FIPAVASTYGFVFS-AVEVIAILASFGLLACTFFNKVYILFKPSRNT 868  
 RESULT 14  
 US-08-484-565-8  
 ; Sequence 8, Application US/08484565  
 ; Patent No. 5763569  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Edward M. Brown  
 ; APPLICANT: Steven C. Hobert  
 ; APPLICANT: James E. Garrett, Jr.  
 ; TITLE OF INVENTION: CALCIUM RECEPTOR ACTIVE  
 ; TITL OF INVENTION: MOLECULES  
 ; NUMBER OF SEQUENCES: 20  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Lyon & Lyon  
 ; STREET: First Interstate World Center  
 ; STREET: Suite 4700  
 ; STREET: 633 West Fifth Street  
 ; CITY: Los Angeles  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 90071  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: FAST3D  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484,565  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 APPLICATION NUMBER: 08/351,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/006  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510

INFORMATION FOR SEQ ID NO: 8:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1079 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-484-565-8

Query Match 24.5%; Score 1088.5; DB 1; Length 1079;  
 Best Local Similarity 31.7%; Pred. No. 2.8e-94; Mismatches 328; Indels 121; Gaps 31;  
 Matches 284; Conservative 164; Mismatches 328; Indels 121; Gaps 31;  
 Db 9 ALLALAW-----HSSAVGDPDQAKKBDILGGLPFH---GVAAKD--ODLKSRRPE 56  
 Qy 10 SLFFLLWVIAEPAEINSDFLPL-----GDUYLGGLSLHANNKGIVHLNLFQVPMCKEY 62  
 Db 117 QNKDSLNLDEFNCSEHIPSITAVWGTGSGVSTAVANLGLPFYIPOVSYASSRULSN 176  
 Qy 174 KVREPLALTTPADDHTEAMVQMLHRRWNVNIVLVSSTYGRDNGCQGLGGRVAREDIC 233  
 Db 177 KNOQKSFLKRTIPNDHQATAMADIEYFRWNWGTIAADDYGRPGIEKFKREBAERDIC 236  
 Qy 234 IAFQETLPLQPNOMNTSBERORLVTIDKLOOSTARVWVVSPLDTLYHFFNEVLRQNP 293  
 Db 237 IDPSLLI----SQYSDPBEIQQVWV---QNSTAKVIVWFFSGPDPDLEPLIKEIVRN 288  
 Db 294 TGAVWIASESWAIDPVNLNTEIGH-LCTFLGLITIOSVPIPGSEF----- 338  
 Db 289 TGRILWLABEAWASSLL-AMPEYFHVWGGTIGFLKAGQIQPFREFQVKHRRKSVNGP 347  
 Qy 339 -REWGPQA-----GPPPSRRTSQSYTCENQECNCINLNTSFVNITLRLSGE---- 382  
 Db 348 AKWEFWEFTFNCHLQEGAKAGPLPVDTFVSH--BEGGNRLNSSTAFLPL--CTGDENINS 403  
 Qy 383 -----RUVYSSVAVAVAHALHSLLGC-----DKSTCKTRVUVYWPOLLE 423  
 Db 404 VETPYMDYEHRLISYNVYLAVSTAHALQDITVCLPSRGLIFTINGSCADIKYBAWQVLUH 463  
 Qy 424 IWKUNFT-LDHDQIFPDDQGDVALHLETVQWQMDRSON--FOSVASYPL---QFQL 475  
 Db 464 LRHUNFTNMGEQVTFDSCGDLVGNYSINWHSPEQSGIVKRY-GYNNVVAKKGBRLF 522  
 Qy 476 KNOTDISHNTVNNTIPMNCNSKRCGSKKCPV-GIHCFCFCIDCICPCTGFLNHTBEBYE 534  
 Db 523 INEEKILMSGFSREVFPNSNCRDCQAGTRKGIGIEPCTCCFECVCPDGEYSET--DASA 581  
 Qy 535 CQCPNNNSWYQBTSCPKQVLFEMEAPTAVALAALGPLSTLALVFWRHQQT 594  
 Db 582 CDKCPDDFWSNENHNTSCAKETEFLAWTEPFGIAUTLFLVGLFPLTAVLGVPIKFRNTP 641  
 Qy 595 IVERSGAGPMCFMLLJLJYAVMWPVYQGPVKUSTCLCQLPCLTICISIANSRSFO 654  
 Db 642 IVKATNRELSEYLULSLLCFFSSLFFGEPOWTURPAGFISVFLCISCLVKTNR 701  
 Qy 655 IVCAP--KMASRPRPRAVSYWVYQGPVYVSMAPITVLUVWVIGMLARPOSHPRDPPD 712  
 Db 702 VLLVFEAKIPSFHRK--WWGLNLQFLVFLCTFMQILICIWLYTAPPSYRNHELD 758  
 Qy 713 KITVSCNPYRNSLFLNTSL--DILSVVGFSPAVMGKELPTNNEAKFTLSMVF 769  
 Db 759 EIPITC--HEGSLMALGSLIGYCTCLAAICFFAFSKRKLPEFNNEAKFTLSMVF 815  
 Qy 770 TSSVSLCTFMSAYSGLVLTIVLVLVNLALISLG--YFGPKCIMILFPERNT 822  
 Db 816 IIVWIS--FIPAVASTYGFVFS-AVEVIAILASFGLLACTFFNKVYILFKPSRNT 868

Search completed: May 11, 2004, 15:30:31  
Job time : 22.8426 secs

Query Match 24.5%; Score 1088.5; DB 2; Length 1079; Best Local Similarity 31.7%; Pred. No. 2.8e-94; Matches 284; Conservative 164; Mismatches 328; Indels 121; Gaps 31;

QY 10 SLFPILLWLAEPAAENSDFYLP-----GDYLLGGFLSLHANMKIGIVHLLNFLQVPMCKEY 622

**THIS PAGE BLANK (usP10)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

## OM protein - protein search, using sw model

Run on:

May 11, 2004, 15:27:42 ; Search time 40.6604 Seconds  
(without alignments)  
5720.583 Million cell updates/sec

Title:

US-09-927-315-9

Perfect score:

4443

Sequence:

1 MGPRAKTICSLFLWVLAE.....ERNTPAYFNSMIGOQYTRRD 838

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

1140673 seqs, 27756755 residues

Total number of hits satisfying chosen parameters:

1140673

Minimum DB seq length:

0

Maximum DB seq length:

200000000

Post-processing:

Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database:

Published Applications AA:\*

1: /cgnd2\_6/pdata/2/pubpaal/us07\_PUBCOMB.pep:\*

2: /cgnd2\_6/pdata/2/pubpaal/PCTUS07\_PUBCOMB.pep:\*

3: /cgnd2\_6/pdata/2/pubpaal/us06\_PUBCOMB.pep:\*

4: /cgnd2\_6/pdata/2/pubpaal/us05\_PUBCOMB.pep:\*

5: /cgnd2\_6/pdata/2/pubpaal/us07\_PUBCOMB.pep:\*

6: /cgnd2\_6/pdata/2/pubpaal/PCTUS07\_PUBCOMB.pep:\*

7: /cgnd2\_6/pdata/2/pubpaal/us08\_PUBCOMB.pep:\*

8: /cgnd2\_6/pdata/2/pubpaal/us09\_PUBCOMB.pep:\*

9: /cgnd2\_6/pdata/2/pubpaal/us09\_PUBCOMB.pep:\*

10: /cgnd2\_6/pdata/2/pubpaal/us09\_PUBCOMB.pep:\*

11: /cgnd2\_6/pdata/2/pubpaal/us09\_PUBCOMB.pep:\*

12: /cgnd2\_6/pdata/2/pubpaal/us09\_PUBCOMB.pep:\*

13: /cgnd2\_6/pdata/2/pubpaal/us10\_PUBCOMB.pep:\*

14: /cgnd2\_6/pdata/2/pubpaal/us10\_PUBCOMB.pep:\*

15: /cgnd2\_6/pdata/2/pubpaal/us10\_PUBCOMB.pep:\*

16: /cgnd2\_6/pdata/2/pubpaal/us10\_PUBCOMB.pep:\*

17: /cgnd2\_6/pdata/2/pubpaal/us10\_PUBCOMB.pep:\*

18: /cgnd2\_6/pdata/2/pubpaal/us60\_PUBCOMB.pep:\*

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4443	100.0	838	10	US-09-927-315-9
2	4443	100.0	838	14	US-10-190-417-9
3	4392.5	98.9	839	9	US-09-897-427A-4
4	4392.5	98.9	839	14	US-10-035-045-21
5	4392.5	98.9	839	15	US-10-179-373-6
6	4371.5	98.4	839	14	US-10-246-785-4
7	3514	79.1	669	13	US-10-124-598-7
8	3514	79.1	669	14	US-10-096-144-7
9	3514	79.1	669	14	US-10-225-567A-683
10	3203.5	72.1	843	10	US-09-927-315-7
11	3203.5	72.1	843	13	US-10-124-598-1
12	3203.5	72.1	843	14	US-10-096-144-1
13	3203.5	72.1	843	14	US-10-246-785-6
14	3203.5	72.1	843	14	US-10-190-417-7
15	3203.5	72.1	843	14	US-10-190-417-7

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## RESULT 1

US-09-927-315-9

Sequence 9, Application US/09927315

Publication No. US20030040045A1

GENERAL INFORMATION:

APPLICANT: Zuker, Charles S.

APPLICANT: Ryba, Nicholas J.P.

APPLICANT: Nelson, Greg

APPLICANT: Hoon, Mark A.

APPLICANT: Chandrasekhar, Jayaram

APPLICANT: Zhang, Yifeng

APPLICANT: The Regents of the University of California

APPLICANT: The Government of the United States of America

APPLICANT: as represented by the Secretary of the

APPLICANT: Department of Health and Human Services

TITLE OF INVENTION: Mammalian Sweet Taste Receptors

FILE REFERENCE: 02307E-120101US

CURRENT APPLICATION NUMBER: US09/927,315

CURRENT FILING DATE: 2001-08-10

PRIOR APPLICATION NUMBER: US 60/302,898

PRIOR FILING DATE: 2001-07-03

NUMBER OF SEQ ID NOS: 25

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO: 9

LENGTH: 838

TYPE: PRT

ORGANISM: Homo sapiens

FEATURE: OTHER INFORMATION: human TLR2 sweet taste receptor

US-09-927-315-9

Query Match 100.0%; Score 4443; DB 10; Length 838;

Best Local Similarity 100.0%; Prcd. No. 0;

Matches 838; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Sequence 1, Appli

Sequence 2, Appli

Sequence 3, Appli

Sequence 4, Appli

Sequence 5, Appli

Sequence 6, Appli

Sequence 7, Appli

Sequence 8, Appli

Sequence 9, Appli

Sequence 10, Appli

Query Match 100.0%; Score 4443; DB 10; Length 838;

Best Local Similarity 100.0%; Prcd. No. 0;

Matches 838; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Sequence 1, Appli

Sequence 2, Appli

Sequence 3, Appli

Sequence 4, Appli

Sequence 5, Appli

Sequence 6, Appli

Sequence 7, Appli

Db

OY

1 MGPRAKTICSLFLWVLAEPENAISDFYLPGDYIAGGFLSLHANMKIVHLNFLQVPMCK 60

1 MGPRAKTICSLFLWVLAEPENAISDFYLPGDYIAGGFLSLHANMKIVHLNFLQVPMCK 60

CURRENT FILING DATE: 2002-11-14  
 PRIORITY APPLICATION NUMBER: US 60/302,898  
 PRIORITY FILING DATE: 2001-07-03  
 PRIORITY APPLICATION NUMBER: US 09/927,315  
 PRIORITY FILING DATE: 2001-08-10  
 PRIORITY APPLICATION NUMBER: US 60/318,925  
 PRIORITY FILING DATE: 2002-02-22  
 NUMBER OF SEQ ID NOS: 30  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO 9  
 LENGTH: 838  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 FEATURE: OTHER INFORMATION: human TIR2  
 US-10-190-417-9

Query Match 100.0% Score 443: DB 14: Length 838:  
 Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;  
 Matches 838; Conservative 0; SeqID 1 MGRAKTCSLFLWVJA PAENSDFLPGDYLGGPSLHANMKCIVHNLPLQVNC 60  
 Db 421 LEEIWKVNLTLDHQIPFDQGDVALHIEIVQWDRSONPQFQVASYPLQRLKNIQ 480  
 Db 421 LEEIWKVNLTLDHQIPFDQGDVALHIEIVQWDRSONPQFQVASYPLQRLKNIQ 480  
 QY 481 ISWHTVNNTIPMSMCSKRCGSKQKKPVGIVHVCFCEDICLCPGLTFLNHTEDEVQACPN 540  
 Db 481 ISWHTVNNTIPMSMCSKRCGSKQKKPVGIVHVCFCEDICLCPGLTFLNHTEDEVQACPN 540  
 QY 541 NEWSYQESTCSKRCOLVLEHEAPTAVALLAIGFLSTLAVIWFHQTIVSAG 600  
 Db 541 NEWSYQESTCSKRCOLVLEHEAPTAVALLAIGFLSTLAVIWFHQTIVSAG 600  
 QY 601 GPMCLMLTLLVAYMVVPVYQPKVSTCLCQALPCLFCITCISCAVRSFOVCAFK 660  
 Db 601 GPMCLMLTLLVAYMVVPVYQPKVSTCLCQALPCLFCITCISCAVRSFOVCAFK 660  
 QY 661 MASRPRAYSYWRYQGYVMSAFITVLUKIVVIGMLARPQSHPRTDPPKIVSCN 720  
 Db 661 MASRPRAYSYWRYQGYVMSAFITVLUKIVVIGMLARPQSHPRTDPPKIVSCN 720  
 QY 721 PYRNLSPFLFTSDLILSUVGFSFAYMKELPTNNEAKETLSTMFYFUSVSLCTEV 780  
 Db 721 PYRNLSPFLFTSDLILSUVGFSFAYMKELPTNNEAKETLSTMFYFUSVSLCTEV 780  
 RESULT 2  
 US-10-190-417-9  
 ; Sequence 9, Application US/10190417  
 ; Publication No. US20030166137A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Zuker, Charles S.  
 ; APPLICANT: Ryba, Nicholas J. P.  
 ; APPLICANT: Chandrasekar, Jayaram  
 ; APPLICANT: Hoon, Mark A.  
 ; APPLICANT: Nelson, Greg  
 ; APPLICANT: Zhang, Yifeng  
 ; APPLICANT: The Regents of the University of California  
 ; APPLICANT: The Government of the United States of America  
 ; APPLICANT: As represented by the Secretary of the  
 ; APPLICANT: Department of Health and Human Services  
 ; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste  
 ; TITLE OF INVENTION: Receptors  
 ; FILE REFERENCE: 02307E-120130S  
 ; CURRENT APPLICATION NUMBER: US/10/190,417

QY 781 AYSGVLTIVDVLVTLVNLALISLGYFGPKCYMILFPERNTPAYNSMIGYTMRD 838  
 ; Sequence 4, Application US/09897427A  
 ; Patent No. US20020160424A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: ADLER, JON ELLIOT  
 ; APPLICANT: LI, XIADONG  
 ; APPLICANT: STASZEWSKI, LENA  
 ; APPLICANT: XU, HONG  
 ; APPLICANT: EHEVERRI, FERNANDO  
 ; TITLE OF INVENTION: TIR HETERO-OLIGOMERIC TASTE RECEPTORS  
 ; FILE REFERENCE: 078001-0282558  
 ; CURRENT APPLICATION NUMBER: US/09/897,427A  
 ; CURRENT FILING DATE: 2001-07-03  
 ; NUMBER OF SEQ ID NOS: 10  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 4  
 ; LENGTH: 839  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-897-427A-4

Query Match 98.9%; Score 4392.5; DB 9; Length 839;  
 Best Local Similarity 99.3%; Pred. No. 0; Mismatches 5; Indels 1; Gaps 1;  
 Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;  
 QY 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Db 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Qy 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Qy 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Db 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Qy 241 PTLOQPNQNMTEBERQRLVLTIDKLUQOSTARVWVFSRDLTLYHFFNEVRONFTGAWIA 300  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Qy 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Db 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Qy 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Db 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Qy 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Qy 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGPLSTIAILVFWRHEQPTVRSAG 600  
 Db 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGFLSTIALVFWRHEQPTVRSAG 600  
 Qy 601 GPMCFMLMLTLLVAVMVWVPPVYGPKVSTCJCRQALPFLCTICSCIAVRSFQIVCAFK 660  
 ; RESULT 3  
 US-09-897-427A-4  
 ; Sequence 4, Application US/09897427A  
 ; Patent No. US20020160424A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: ADLER, JON ELLIOT  
 ; APPLICANT: LI, XIADONG  
 ; APPLICANT: STASZEWSKI, LENA  
 ; APPLICANT: XU, HONG  
 ; APPLICANT: EHEVERRI, FERNANDO  
 ; TITLE OF INVENTION: TIR HETERO-OLIGOMERIC TASTE RECEPTORS  
 ; FILE REFERENCE: 078001-0282558  
 ; CURRENT APPLICATION NUMBER: US/09/897,427A  
 ; CURRENT FILING DATE: 2001-07-03  
 ; NUMBER OF SEQ ID NOS: 10  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 4  
 ; LENGTH: 839  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-897-427A-4

RESULT 4  
 US-10-035-045-21  
 ; Sequence 21, Application US/10035045  
 ; Publication No. US2003005448A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: ADLER, JON ELLIOT  
 ; APPLICANT: LI, XIADONG  
 ; APPLICANT: STASZEWSKI, LENA  
 ; APPLICANT: O'CONNELL, SHAWN  
 ; APPLICANT: ZOZULIA, SERGEY  
 ; TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME  
 ; FILE REFERENCE: 078003-0280681  
 ; CURRENT APPLICATION NUMBER: US/10/035, 045  
 ; PRIOR APPLICATION NUMBER: 60/259, 227  
 ; PRIOR FILING DATE: 2001-01-03  
 ; PRIOR FILING DATE: 2001-04-19  
 ; NUMBER OF SEQ ID NOS: 24  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 21  
 ; LENGTH: 839  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-035-045-21

Query Match 98.9%; Score 4392.5; DB 14; Length 839;  
 Best Local Similarity 99.3%; Pred. No. 0; Mismatches 5; Indels 1; Gaps 1;  
 Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;  
 QY 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Db 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Qy 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Qy 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Db 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Qy 241 PTLOQPNQNMTEBERQRLVLTIDKLUQOSTARVWVFSRDLTLYHFFNEVRONFTGAWIA 300  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Qy 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Db 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Qy 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Db 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Qy 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Qy 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGPLSTIAILVFWRHEQPTVRSAG 600  
 Db 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGFLSTIALVFWRHEQPTVRSAG 600  
 Qy 601 GPMCFMLMLTLLVAVMVWVPPVYGPKVSTCJCRQALPFLCTICSCIAVRSFQIVCAFK 660  
 ; RESULT 4  
 US-10-035-045-21  
 ; Sequence 21, Application US/10035045  
 ; Publication No. US2003005448A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: ADLER, JON ELLIOT  
 ; APPLICANT: LI, XIADONG  
 ; APPLICANT: STASZEWSKI, LENA  
 ; APPLICANT: O'CONNELL, SHAWN  
 ; APPLICANT: ZOZULIA, SERGEY  
 ; TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME  
 ; FILE REFERENCE: 078003-0280681  
 ; CURRENT APPLICATION NUMBER: US/10/035, 045  
 ; PRIOR APPLICATION NUMBER: 60/259, 227  
 ; PRIOR FILING DATE: 2001-01-03  
 ; PRIOR FILING DATE: 2001-04-19  
 ; NUMBER OF SEQ ID NOS: 24  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 21  
 ; LENGTH: 839  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-035-045-21

Query Match 98.9%; Score 4392.5; DB 14; Length 839;  
 Best Local Similarity 99.3%; Pred. No. 0; Mismatches 5; Indels 1; Gaps 1;  
 Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;  
 QY 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Db 1 MGPRAKTICSLFLMLWLAEPAEADSDFYLPGDYLGGLFSLHANNKGIVHLNFLQVPMCK 60  
 Qy 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 61 EYEVKGIGYNNMQAMRPAVEEINNDSSLPQULGIEIVDVCYISNNVQVPLYFLAEDN 120  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Db 121 LPIQEDSYNSITRVAVIGDNSESYMTVANFLISFLPOITYSASIDSLRDKRFPAL 180  
 Qy 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Db 181 LRTTPSDADHTEAMVQMLHFRNNWITVLVSSDTYGRDNGOLGERVARRIDICIAFOETL 240  
 Qy 241 PTLOQPNQNMTEBERQRLVLTIDKLUQOSTARVWVFSRDLTLYHFFNEVRONFTGAWIA 300  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Db 301 SESWADPVLNLTLEGHGLFLGTTIQSVPVGFSEPREWGPQAGPPPLSRSTSQTNC 360  
 Qy 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Db 361 QBCDNCINATLSFNTLRLSERVWVSVYAVAHHLISLGCDKSTCKRVTWPOL 420  
 Qy 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Db 421 LEEIWKONTFLDHOFPQCDWALHEIOWQMRSONRQFASVASYRQDQLKNIQ 480  
 Qy 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Db 481 ISWHTANTIMSMCSKRCQSGQKCKPVGIMAVCCFCICDCLCPGTFLAHNTBEDYECACPN 540  
 Qy 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGPLSTIAILVFWRHEQPTVRSAG 600  
 Db 541 NEWSYQSETSPKRLQVPLEWHEAPTAVALAALGFLSTIALVFWRHEQPTVRSAG 600  
 Qy 601 GPMCFMLMLTLLVAVMVWVPPVYGPKVSTCJCRQALPFLCTICSCIAVRSFQIVCAFK 660

Qy 421 LEEIWVNFTLHQIFFPQGDVALHLIEWQWDRSQRPFQSTASYPLQROKNIQ 480  
 Qy 421 LEEIWVNFTLHQIFFPQGDVALHLIEWQWDRSQRPFQSTASYPLQROKNIQ 480  
 Db 421 LEEIWVNFTLHQIFFPQGDVALHLIEWQWDRSQRPFQSTASYPLQROKNIQ 480  
 Qy 481 ISWHTVNNTIPMSMSKRCQSGQKKPPVGIRVCCFCIDCICLPGTFLNHTEDBEYCACPN 540  
 Qy 481 ISWHTVNNTIPMSMSKRCQSGQKKPPVGIRVCCFCIDCICLPGTFLNHTEDBEYCACPN 540  
 Db 541 NEWSYQSETSCFKRQVLFLEWHAPTAVALLAALGFLSTAILVIFWRHFQPTIVSAG 600  
 Qy 541 NEWSYQSETSCFKRQVLFLEWHAPTAVALLAALGFLSTAILVIFWRHFQPTIVSAG 600  
 Db 541 NEWSYQSETSCFKRQVLFLEWHAPTAVALLAALGFLSTAILVIFWRHFQPTIVSAG 600  
 Qy 601 GPMCFMLTLLVAYMVPVYGPVKSTCLCROALFPCTICISCAVRSFQIVCAFK 660  
 Db 601 GPMCFMLTLLVAYMVPVYGPVKSTCLCROALFPCTICISCAVRSFQIVCAFK 660  
 Qy 661 MASRPRAYSWRQGPYVMSAFITVLUKVNIVIGMLARPOS-HPRTPDPKTIIVSC 719  
 Db 661 MASRPRAYSWRQGPYVMSAFITVLUKVNIVIGMLARPOS-HPRTPDPKTIIVSC 719  
 Qy 720 NPYRNSSLFTNSDILSUVGSFAYMGKELPNTNEAKFTISMTFYTSSVLCTFM 779  
 Db 721 NPYRNSSLFTNSDILSUVGSFAYMGKELPNTNEAKFTISMTFYTSSVLCTFM 780  
 Qy 780 SAYSGVLVITVIDLVTVLNLALISLGYFGPKCMLFYPERNTPAYFNSMIGOYMRD 838  
 Db 781 SAYSGVLVITVIDLVTVLNLALISLGYFGPKCMLFYPERNTPAYFNSMIGOYMRD 839

RESULT 5  
 US-10-179-373-6  
 ; Sequence 6, Application US/10179373  
 ; Publication No. US20030232407A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: ZOLLER, MARK  
 ; APPLICANT: LI, XIAODONG  
 ; APPLICANT: STASZEWSKI, LEVA  
 ; APPLICANT: O'CONNELL, SHAWN  
 ; APPLICANT: ZOZULYA, SERGEY  
 ; APPLICANT: XU, HONG  
 ; APPLICANT: ECHEVERRI, FERNANDO  
 ; TITLE OF INVENTION: TIR HETERO-OLIGOMERIC TASTE RECEPTORS AND CELL LINES  
 ; TITLE OF INVENTION: THAT EXPRESS SAID RECEPTORS AND USE THEREOF FOR  
 ; FILE REFERENCE: 078003-0291566  
 ; CURRENT APPLICATION NUMBER: US/10/179,373  
 ; CURRENT FILING DATE: 2002-06-26  
 ; PRIOR APPLICATION NUMBER: 60/300,434  
 ; PRIOR FILING DATE: 2001-06-26  
 ; PRIOR APPLICATION NUMBER: 60/304,749  
 ; PRIOR FILING DATE: 2001-07-13  
 ; PRIOR APPLICATION NUMBER: 60/310,493  
 ; PRIOR FILING DATE: 2001-08-08  
 ; PRIOR APPLICATION NUMBER: 60/331,771  
 ; PRIOR FILING DATE: 2001-11-21  
 ; PRIOR APPLICATION NUMBER: 60/339,472  
 ; PRIOR FILING DATE: 2001-12-14  
 ; PRIOR APPLICATION NUMBER: 60/372,090  
 ; PRIOR FILING DATE: 2002-04-15  
 ; PRIOR APPLICATION NUMBER: 60/374,143  
 ; PRIOR FILING DATE: 2002-04-22  
 ; NUMBER OF SEQ ID NOS: 19  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 6  
 ; LENGTH: 839  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-179-373-6

Query Match Score 4392.5; DB 15; Length 839;  
 Best Local Similarity 99.3%; Prede. No. 0; Mismatches 5; Indels 1; Gaps 1;

Qy 1 MGPRAKTICSLPFLUWVIAPAENSDFWLPGDNLGGFLSHAMKGIVHLNLFQVWCK 60  
 Qy 1 MGPRAKTICSLPFLUWVIAPAENSDFWLPGDNLGGFLSHAMKGIVHLNLFQVWCK 60  
 Db 1 MGPRAKTICSLPFLUWVIAPAENSDFWLPGDNLGGFLSHAMKGIVHLNLFQVWCK 60  
 Qy 61 EYEVKIGNTLQMQRFAVEEINNDSSILPGVNLGVEUDCVTISNNYQVLFVLAHDN 120  
 Db 61 EYEVKIGNTLQMQRFAVEEINNDSSILPGVNLGVEUDCVTISNNYQVLFVLAHDN 120  
 Qy 121 LLPTQDQSYNISRVAVIGPDSESVMTANFLSFLPQIYTSATSDELRKURPAL 180  
 Db 121 LLPTQDQSYNISRVAVIGPDSESVMTANFLSFLPQIYTSATSDELRKURPAL 180  
 Qy 181 LRTPSADHVEAMVQMLAHFRMWITLVSSTYGRONGQOLLGERVARRIDCIAFQTL 240  
 Db 181 LRTPSADHVEAMVQMLAHFRMWITLVSSTYGRONGQOLLGERVARRIDCIAFQTL 240  
 Qy 241 PTLOPNQNMTESEERQLVITVDKLQOSTARVVVFSPLTLYRPNELQNTGAVIA 300  
 Db 241 PTLOPNQNMTESEERQLVITVDKLQOSTARVVVFSPLTLYRPNELQNTGAVIA 300  
 Qy 301 SESWAIPLVNLTELGHTFEGITISVPIGCFSEREMQAGPPLSRTSQSYCN 360  
 Db 301 SESWAIPLVNLTELGHTFEGITISVPIGCFSEREMQAGPPLSRTSQSYCN 360  
 Qy 361 QBCDNCLNATLSFNTLRLISGERVYVSYTSAVAVAHLSLJGCDKSTCKVWVYPLQ 420  
 Db 361 QBCDNCLNATLSFNTLRLISGERVYVSYTSAVAVAHLSLJGCDKSTCKVWVYPLQ 420  
 Qy 421 LEEIWVNFTLHQIFFPQGDVALHLIEWQWDRSQRPFQSTASYPLQROKNIQ 480  
 Db 421 LEEIWVNFTLHQIFFPQGDVALHLIEWQWDRSQRPFQSTASYPLQROKNIQ 480  
 Qy 481 ISWHTVNNTIPMSMSKRCQSGQKKPPVGIRVCCFCIDCICLPGTFLNHTEDBEYCACPN 540  
 Db 481 ISWHTVNNTIPMSMSKRCQSGQKKPPVGIRVCCFCIDCICLPGTFLNHTEDBEYCACPN 540  
 Qy 541 NEWSYQSETSCFKRQVLFLEWHAPTAVALLAALGFLSTAILVIFWRHFQPTIVSAG 600  
 Db 541 NEWSYQSETSCFKRQVLFLEWHAPTAVALLAALGFLSTAILVIFWRHFQPTIVSAG 600  
 Qy 601 GPMCFMLTLLVAYMVPVYGPVKSTCLCROALFPCTICISCAVRSFQIVCAFK 660  
 Db 601 GPMCFMLTLLVAYMVPVYGPVKSTCLCROALFPCTICISCAVRSFQIVCAFK 660  
 Qy 661 MASRPRAYSWRQGPYVMSAFITVLUKVNIVIGMLARPOS-HPRTPDPKTIIVSC 719  
 Db 661 MASRPRAYSWRQGPYVMSAFITVLUKVNIVIGMLARPOS-HPRTPDPKTIIVSC 719  
 Qy 720 NPYRNSSLFTNSDILSUVGSFAYMGKELPNTNEAKFTISMTFYTSSVLCTFM 779  
 Db 721 NPYRNSSLFTNSDILSUVGSFAYMGKELPNTNEAKFTISMTFYTSSVLCTFM 780  
 Qy 780 SAYSGVLVITVIDLVTVLNLALISLGYFGPKCMLFYPERNTPAYFNSMIGOYMRD 838  
 Db 781 SAYSGVLVITVIDLVTVLNLALISLGYFGPKCMLFYPERNTPAYFNSMIGOYMRD 839

RESULT 6  
 US-10-246-785-4  
 ; Sequence 4, Application US/10246785  
 ; Publication No. US20030148448A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: IRM, LLC  
 ; APPLICANT: The Scripps Research Institute  
 ; APPLICANT: Liao, Jiayu  
 ; APPLICANT: Sheng, Ding  
 ; APPLICANT: Schultz, Peter G  
 ; TITLE OF INVENTION: Sweet Taste Receptors  
 ; FILE REFERENCE: 36-002810US/PC  
 ; CURRENT APPLICATION NUMBER: US/10/246,785  
 ; CURRENT FILING DATE: 2002-12-09  
 ; PRIOR APPLICATION NUMBER: US 60/323,450

PRIORITY FILING DATE: 2001-09-18	
NUMBER OF SEQ ID NOS: 22	
SOFTWARE: Patentin version 3.1	
SEQ ID NO 4	
LENGTH: 839	
TYPE: PRT	
ORGANISM: Homo sapiens	
IS-10-246-785-4	
Query Match 98.4%; Score 4371.5; DB 14; Length 839;	
Best Local Similarity 98.7%; Pred. No: 0;	
Matches 828; Conservative 2; Mismatches 8; Indels 1; Gaps 1;	
1 MGPRAKTICSFPLLWMLAEPENSPRSPYPPDYLGLGFLSHANNKGIVHNFLOPMCK 60	
1 MGPRAKTICSFPLLWMLAEPENSPRSPYPPDYLGLGFLSHANNKGIVHNFLOPMCK 60	
61 EYEVKIGYINLQAMRFAVEEINNDSSLPSVLYEVNDVYISNNQVLYELAHDN 120	
61 EYEVKIGYINLQAMRFAVEEINNDSSLPSVLYEVNDVYISNNQVLYELAHDN 120	
121 LIPIQDYSNTISRVVAVIGDNDSESMVTANFLSFLLPOTYSAISDESLDKYRFPAL 180	
121 LIPIQDYSNTISRVVAVIGDNDSESMVTANFLSFLLPOTYSAISDESLDKYRFPAL 180	
181 LRTTSDAHDHEVTEAMVQMLHFRWWMTVLSSTDYGRDNGOLLGERVARIDICIAFOETL 240	
181 LRTTSDAHDHEVTEAMVQMLHFRWWMTVLSSTDYGRDNGOLLGERVARIDICIAFOETL 240	
241 PTLOPNQNMNTSEERORLVTVDKQOSTARVVVSPDLTYHFFNENVLRQNFTGAWIA 300	
241 PTLOPNQNMNTSEERORLVTVDKQOSTARVVVSPDLTYHFFNENVLRQNFTGAWIA 300	
301 SESWAIDDPVHLNLTLELRHGTFLGTTQSVPQGSEFREWGPOGPPPLSRTSOTCN 360	
301 SESWAIDDPVHLNLTLELRHGTFLGTTQSVPQGSEFREWGPOGPPPLSRTSOTCN 360	
361 QBCDNCLNATSFNTILRSLGSRVYVSVSAYAVAHALHSLLGCDKSTCKRVTYPPWQL 420	
361 QBCDNCLNATSFNTILRSLGSRVYVSVSAYAVAHALHSLLGCDKSTCKRVTYPPWQL 420	
361 QEDCNCLNATSFNTILRSLGSRVYVSVSAYAVAHALHSLLGCDKSTCKRVTYPPWQL 420	
421 LEEWKWNFTLHDHQIFFDPOGDAVHLTEVOWQDRSONPQFOSVASYYPLQRLKNIQD 480	
421 LEEWKWNFTLHDHQIFFDPOGDAVHLTEVOWQDRSONPQFOSVASYYPLQRLKNIQD 480	
481 ISWHTNTNTPMSMSKRCQSGQKURGVHCCFECIDC1PTLNHTEDEYECACPN 540	
481 ISWHTNTNTPMSMSKRCQSGQKURGVHCCFECIDC1PTLNHTEDEYECACPN 540	
541 NEWSQSETSCFKRQVLFLEWHEAPTIAVALLAAGFLSTL1VFRWQFQTPVRSAQ 600	
541 NEWSQSETSCFKRQVLFLEWHEAPTIAVALLAAGFLSTL1VFRWQFQTPVRSAQ 600	
601 GPMCFMLTLLVAVWVPUVGPVKSTLCRQALPFLCPTICISCIAYRSFQIVCAFK 660	
601 GPMCFMLTLLVAVWVPUVGPVKSTLCRQALPFLCPTICISCIAYRSFQIVCAFK 660	
661 MASRPRAYSTWRYQGPVMSAFTVLUKIVIGMLARPOS APTDDPKTIVSC 719	
661 MASRPRAYSTWRYQGPVMSAFTVLUKIVIGMLARPOS APTDDPKTIVSC 719	
720 NPYNRNLLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 779	
720 NPYNRNLLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 779	
721 NPNKNSLFLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 780	
721 NPNKNSLFLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 780	
780 SAYSGVLTIVDLYLVTNLALISGFGPKCYMILFPERNTPAYNSNQIYGMTRD 838	
780 SAYSGVLTIVDLYLVTNLALISGFGPKCYMILFPERNTPAYNSNQIYGMTRD 838	
781 SAYSGVLTIVDLYLVTNLALISGFGPKCYMILFPERNTPAYNSNQIYGMTRD 839	
781 SAYSGVLTIVDLYLVTNLALISGFGPKCYMILFPERNTPAYNSNQIYGMTRD 839	
Query Match 79.1%; Score 3514; DB 13; Length 669;	
Best Local Similarity 98.4%; Pred. No: 0;	
Matches 666; Conservative 1; Mismatches 2; Indels 8; Gaps 2;	
QY 162 ITYSAISDESLDKYRFPALLRTTSADHHEVTEAMVQMLHFRWWMTVLSSTDYGRDNGQ 221	
Db 1 ITYSAISDESLDKYRFPALLRTTSADHHEVTEAMVQMLHFRWWMTVLSSTDYGRDNGQ 60	
QY 222 LIGERVARIDICIAFOETLPTLQNMNTSEERORLVTVDKQOSTARVVVSPDLTL 281	
Db 61 LIGERVARIDICIAFOETLPTLQNMNTSEERORLVTVDKQOSTARVVVSPDLTL 12	
QY 282 YHFFNEVLRQNFTGAWIAWSESWIDPVHLNLTGLGHGTFLGTTQSVPQGSEFREW 341	
Db 121 YHFFNEVLRQNFTGAWIAWSESWIDPVHLNLTGLGHGTFLGTTQSVPQGSEFREW 180	
QY 342 GPOQPPPLSRTSOTCNQEDCNCLNATSFNTILRSLGSRVYVSVSAYAVAHALHS 401	
Db 421 LIGCDKSTCKRVTYPPWQLEIWKWNFTLHDHQIFFDPOGDAVHLTEVOWQDRSONPQFOSVASYYPLQRLKNIQD 300	
181 GPOQPPPLSRTSOTCNQEDCNCLNATSFNTILRSLGSRVYVSVSAYAVAHALHS 240	
402 LLGCDKSTCKRVTYPPWQLEIWKWNFTLHDHQIFFDPOGDAVHLTEVOWQDRSONPQFOSVASYYPLQRLKNIQD 461	
241 LIGCDKSTCKRVTYPPWQLEIWKWNFTLHDHQIFFDPOGDAVHLTEVOWQDRSONPQFOSVASYYPLQRLKNIQD 300	
462 FOSVASYYPLQRLKNIQDISWHTNTNTPMSMSKRCQSGQKURGVHCCFECIDC1 521	
301 FOSVASYYPLQRLKNIQDTSLHTNTNTPMSMSKRCQSGQKURGVHCCFECIDC1 535	
522 PGTEFLNHTEDEYECACPNNEWSQSETSCFKRQVLFLEWHEAPTIAVALLAAGFLSTL 581	
360 PGTEFLNHTEDEYECACPNNEWSQSETSCFKRQVLFLEWHEAPTIAVALLAAGFLSTL 412	
582 AILVFWRHFQTPVRSAGGPMCMFLTLLVAVWVPUVGPVKSTLCRQALPFLCPT 641	
413 AILVFWRHFQTPVRSAGGPMCMFLTLLVAVWVPUVGPVKSTLCRQALPFLCPT 477	
642 TICSCIAYRSFQIVCAFKMSAFTVLUKIVIGMLARPOS APTDDPKTIVSC 701	
473 TICSCIAYRSFQIVCAFKMSAFTVLUKIVIGMLARPOS APTDDPKTIVSC 701	
702 QSHRTDPDPKTTIVSCNPYRNLLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 532	
533 QSHRTDPDPKTTIVSCNPYRNLLNTSDLLSUVGSFAYMKGELPLTNNNEAKPITASMTYFPTSSYLCFTM 592	

RESULT 7  
US-10-124-598-7  
; Sequence 7, Application US/10124598

QY 822 TPAYFNSMIGYTMRRD 838  
 Db 653 TPAYFNSMIGYTMRRD 669

RESULT 8  
 US-10-096-144-7  
 Sequence 7, Application US/10096144  
 Publication No. US2003002288A1  
 GENERAL INFORMATION:  
 APPLICANT: Zuker, Charles S.  
 APPLICANT: Adler, Jon Elliot  
 APPLICANT: Lindemeyer, Juergen  
 APPLICANT: The Regents of the University of California  
 TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
 FILE REFERENCE: 02307BB-088720US

CURRENT APPLICATION NUMBER: US10/056,144  
 CURRENT FILING DATE: 2003-03-08  
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/361,631  
 PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/095,464  
 PRIOR FILING DATE: EARLIER FILING DATE: 1998-07-28  
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112,747  
 PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17  
 NUMBER OF SEQ ID NOS: 10  
 SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO 7  
 LENGTH: 669  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 FEATURE:  
 OTHER INFORMATION: acid sequence  
 US-10-096-144-7

Query Match 79.1%; Score 3514; DB 14; Length 669;  
 Best Local Similarity 98.4%; Pred. No. 0; Mismatches 2; Indels 8; Gaps 2;  
 Matches 666; Conservative 1;

QY 162 ITYSALISDELRDKVTPALRRTPSADHVVEMQVLMHFRWNWIVLVSSTDYGRDNGQ 221  
 Db 1 ITYSALISDELRDKVTPALRRTPSADHVVEMQVLMHFRWNWIVLVSSTDYGRDNGQ 60

QY 222 LLGERVARRDICTIAFOETPLPQLQPNQNTSEERORLVTVDKLUQOSTARYVWVSPDITL 281  
 Db 61 LLGERVARRDICTIAFOETPLPQLQPNQNTSEERORLVTVDKLUQOSTARYVWVSPDITL 120

QY 282 YHFFNEVLRQNTGAWMIAESWADPVLNLTELGHTPLGLTQSPVPGSEFREW 341  
 Db 121 YHFFNEVLRQNTGAWMIAESWADPVLNLTELGHTPLGLTQSPVPGSEFREW 180

QY 342 GPOQGPPPLSRTSQSYTCNQECNLNATSFNTLRLSRSRVTYVSYSAVVAHALHS 401  
 Db 181 GPOQGPPPLSRTSQSYTCNQECNLNATSFNTLRLSRSRVTYVSYSAVVAHALHS 240

Db 402 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 461  
 QY 402 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 461

Db 241 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 300

QY 462 FQSVASYYPLQRLKNIDISWHTVNNTIPMSMSKRCOSGQKKKPGVTHVCCFECIDL 521  
 Db 301 FQSVASYYPLQRLKNIK-TSLHTVNTIPMSMSKRCOSGQKKKPGVTHVCCFECIDL 359

QY 522 PGTLNHTEDBEYEQACPNNEWSYQSETSFKRLQVLEHEAPTAVALLAALGFLSTL 581  
 Db 360 PGTLNHTEDBEYEQACPNNEWSYQSETSFKRLQVLEHEAPTAVALLAALGFLSTL 412

Db 582 AILVIFWRHFTQPTIVSAGGPMCFMLTLLVAVMVWVPTVGPVKVSTCLCQLFLPLCF 641  
 Db 413 AILVIFWRHFTQPTIVSAGGPMCFMLTLLVAVMVWVPTVGPVKVSTCLCQLFLPLCF 472

RESULT 9  
 US-10-225-567A-683  
 Sequence 683, Application US/10225567A  
 Publication No. US20030113798A1  
 GENERAL INFORMATION:  
 APPLICANT: Lifespan Biosciences  
 APPLICANT: Brown, Joseph P.  
 APPLICANT: Burner, Glenna C.  
 APPLICANT: Roush, Christine L.  
 TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS  
 FILE REFERENCE: 1990-4-4  
 CURRENT APPLICATION NUMBER: US/10/225,567A  
 CURRENT FILING DATE: 2001-12-19  
 PRIOR APPLICATION NUMBER: 60/257,144  
 PRIOR FILING DATE: 2000-12-19  
 NUMBER OF SEQ ID NOS: 2292  
 SOFTWARE: PatentIn version 3.1  
 SEQ ID NO 683  
 LENGTH: 669  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-225-567A-683

Query Match 79.1%; Score 3514; DB 14; Length 669;  
 Best Local Similarity 98.4%; Pred. No. 0; Mismatches 2; Indels 8; Gaps 2;  
 Matches 666; Conservative 1;

QY 162 ITYSALISDELRDKVTPALRRTPSADHVVEMQVLMHFRWNWIVLVSSTDYGRDNGQ 221  
 Db 1 ITYSALISDELRDKVTPALRRTPSADHVVEMQVLMHFRWNWIVLVSSTDYGRDNGQ 60

QY 222 LLGERVARRDICTIAFOETPLPQLQPNQNTSEERORLVTVDKLUQOSTARYVWVSPDITL 281  
 Db 61 LLGERVARRDICTIAFOETPLPQLQPNQNTSEERORLVTVDKLUQOSTARYVWVSPDITL 120

QY 282 YHFFNEVLRQNTGAWMIAESWADPVLNLTELGHTPLGLTQSPVPGSEFREW 341  
 Db 121 YHFFNEVLRQNTGAWMIAESWADPVLNLTELGHTPLGLTQSPVPGSEFREW 180

QY 342 GPOQGPPPLSRTSQSYTCNQECNLNATSFNTLRLSRSRVTYVSYSAVVAHALHS 401  
 Db 181 GPOQGPPPLSRTSQSYTCNQECNLNATSFNTLRLSRSRVTYVSYSAVVAHALHS 240

Db 402 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 461  
 QY 402 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 461  
 Db 241 LLGCDKSTCTKRVYVPPQLEIWKVNFTLHQIFPFDQODVALHETVQWQDRSNP 300

QY 462 FQSVASYYPLQRLKNIDISWHTVNNTIPMSMSKRCOSGQKKKPGVTHVCCFECIDL 521  
 Db 301 FQSVASYYPLQRLKNIK-TSLHTVNTIPMSMSKRCOSGQKKKPGVTHVCCFECIDL 359

QY 522 PGTLNHTEDBEYEQACPNNEWSYQSETSFKRLQVLEHEAPTAVALLAALGFLSTL 581  
 Db 360 PGTLNHTEDBEYEQACPNNEWSYQSETSFKRLQVLEHEAPTAVALLAALGFLSTL 412

QY 582 AILVIFWRHFTQPTIVSAGGPMCFMLTLLVAVMVWVPTVGPVKVSTCLCQLFLPLCF 641  
 Db 413 AILVIFWRHFTQPTIVSAGGPMCFMLTLLVAVMVWVPTVGPVKVSTCLCQLFLPLCF 472

Db 413 ALIVVIFWRHRQPIVIVSAGGPMCFMLTLLVAVMTPVUVGPKVSTCLRQLFPLCF 472  
 Qy 642 TICISCAVRSPQIVCAFKMASRPRAYSYWVTRQGYVSMATILKMWVWIGMLARP 701  
 Db 473 TICISCAVRSPQIVCAFKMASRPRAYSYWVTRQGYVSMATILKMWVWIGMLARP 532  
 Qy 702 OSHPRTDPDDPKITIVSCNPYRNLSLFLNTSLDLISWVGSPAYMGKELPTNWEAKFI 761  
 Db 533 QSHPRTPDPDKITIVSCNPYRNLSLFLNTSLDLISWVGSPAYMGKELPTNWEAKFI 592  
 Qy 762 TLSMTEYFTSYLCTMSAISGVLVLTIDLIUTVNLASLGYSGPCKMLFPERN 821  
 Db 593 TLSMTPYFTSYLCTMSAISGVLVLTIDLIUTVNLASLGYSGPCKMLFPERN 652  
 Qy 822 TPAFNSMISQYTMRRD 838  
 Db 653 TPAFNSMISQYTMRRD 669

RESULT 10  
 US-09-927-315-7  
 ; Sequence 7, Application US/09927315  
 ; Publication No. US2003004005A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Zuker, Charles S.  
 ; APPLICANT: Ryba, Nicholas J.P.  
 ; APPLICANT: Nelson, Greg  
 ; APPLICANT: Hoon, Mark A.  
 ; APPLICANT: Chandrashekhar, Jayaram  
 ; APPLICANT: Zhang, Yifeng  
 ; APPLICANT: The Regents of the University of California  
 ; APPLICANT: The Government of the United States of America  
 ; APPLICANT: as represented by the Secretary of the  
 ; APPLICANT: Department of Health and Human Services  
 ; TITLE OF INVENTION: Mammalian Sweet Taste Receptors  
 ; FILE REFERENCE: 02307E-120101US  
 ; CURRENT APPLICATION NUMBER: US/09/927,315  
 ; PRIOR APPLICATION NUMBER: US 60/302,898  
 ; PRIOR FILING DATE: 2001-08-10  
 ; NUMBER OF SEQ ID NOS: 25  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 843  
 ; TYPE: PRT  
 ; ORGANISM: Rattus sp.  
 ; FEATURE:  
 ; OTHER INFORMATION: rat TIR2 sweet taste receptor

Query Match 72.1%; Score 3203.5; DB 10; Length 843;  
 Best Local Similarity 70.6%; Pred. No. 1.1e-593; Mismatches 133; Indels 7; Gaps 4; Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

US-09-927-315-7

RESULT 11  
 US-10-124-598-1  
 ; Sequence 1, Application US/10124598  
 ; Publication No. US20020119526A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Zuker, Charles S.  
 ; APPLICANT: Adler, Jon Elliott  
 ; APPLICANT: Lindemer, Jürgen  
 ; APPLICANT: The Regents of the University of California  
 ; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
 ; TITLE OF INVENTION: Involved in Sensory Transduction  
 ; FILE REFERENCE: 02307E-08720US  
 ; CURRENT APPLICATION NUMBER: US/10/124, 598  
 ; CURRENT FILING DATE: 2002-04-16  
 ; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/361, 631  
 ; PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
 ; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112, 747  
 ; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; NUMBER OF SEQ ID NOS: 10  
 ; SEQ ID NO 1  
 ; LENGTH: 843  
 ; TYPE: PRT  
 ; ORGANISM: Rattus sp.  
 ; FEATURE:  
 ; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino  
 ; OTHER INFORMATION: acid sequence

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

US-10-124-598-1

RESULT 11  
 US-10-124-598-1  
 ; Sequence 1, Application US/10124598  
 ; Publication No. US20020119526A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Zuker, Charles S.  
 ; APPLICANT: Adler, Jon Elliott  
 ; APPLICANT: Lindemer, Jürgen  
 ; APPLICANT: The Regents of the University of California  
 ; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
 ; TITLE OF INVENTION: Involved in Sensory Transduction  
 ; FILE REFERENCE: 02307E-08720US  
 ; CURRENT APPLICATION NUMBER: US/10/124, 598  
 ; CURRENT FILING DATE: 2002-04-16  
 ; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/361, 631  
 ; PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
 ; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112, 747  
 ; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; NUMBER OF SEQ ID NOS: 10  
 ; SEQ ID NO 1  
 ; LENGTH: 843  
 ; TYPE: PRT  
 ; ORGANISM: Rattus sp.  
 ; FEATURE:  
 ; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino  
 ; OTHER INFORMATION: acid sequence

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFNNTLGERWVSVSAYVAVAHRLLGENVRCTKOKVY 420  
 Qy 417 PWQLIBEIKWNTFLDHQIFFPQCDVALHLETQWQMDRSQNFQOSVASYYPLQRQLK 476  
 Db 421 PWQLIBEIKWNTFLDQODDMPMLDITQWQMDLSQNFQOSVASYYPLQRQLK 480  
 Qy 477 NIQDPSWHTVNNTIMSMCKRCOSGQKCPVGHVCCFCICDULPGTFLNHTDEYEQ 536  
 Db 481 YINNVSWYTPNNTVPUVMSKSCSKCOPGQMKKSVGHLAPCFCBCLDMPGTYLNRSADENCL 540

Db 537 ACPPNNEWSYQSETSCPKRQLVPLEWHEAPTAVALAALGFLSTALDIFWFRHQPTIV 596  
 Db 541 SCPGSMWSYKNDITCQRQPTFLEMHEVPTVVAALGFRSTLALIFWFRHOTPMV 600  
 Qy 597 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 656  
 Db 601 RSAGGPMCFMLTLLVAYMVPVTPVGGPKVSTCLRQLFPLCCTICISCAVSFQIV 660  
 Db 657 CAFKMASRPRAYSYWVYQGPYVSMATILKMWVWIGMLARPISH--RTDPDPK 714  
 Db 661 CVFKMARRLPSAYSFWRVYHGPVYVAFITAIAKVALVUGNMLA-TTINPIGRTDPDDPNI 719  
 Qy 715 TIVSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTSVS 774  
 Db 720 MILSCKPNYRNLLNTSLDLISWVGSPAYMGKELPTNWEAKFTLSMFTS 779  
 Qy 775 LCTFMSVASYGVLVLTIDLLVTVNLASLGYSGPCKMLFPERNTPAFNSMISQYGT 834  
 Db 780 LCTFMSVHDGVLTIDLLVTVNLASLGYSGPCKMLFPERNTSAFNSMISQYGT 839  
 Qy 835 MRR 837  
 Db 840 MRR 842

Query Match 72.1%; Score 3203.5; DB 13; Length 843;

Db 241 QEVLPPIPSSQVMRSEBQRQLDNLKRRRTSARVVVFSEPELSIYSSFFHEVLRNFTGP 300  
 Qy 297 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 356  
 Db 301 WVIASESWADPVLNLTTELGHGFLGIRITQSPVPGFSEFRENGPPQACPPPLRSRTSQS 360  
 Qy 357 YTCNQBCDNCLANATSFNTIIRLSGERRVYVSVSAVVAHALHSLLGCDKSTCTKRVV 416  
 Db 361 TTQNQDCACINTTAKSFFN

Best Local Similarity 70.6%; Pred. No. 1.1e-293; Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4; Query 1 MGPRAKTICSLFELWLAEP---AENSDPYLPDGYLGLGSLSHANNKGIVHLNPLQVP 57  
Db 1 MGPAQRTCLLISLLHLVKPGKLVENSDFHLAGDTLGGFLTLHANKSISHLQVP 60  
Query 58 MCKEYEVKVGYNLQMQRFAVEINNDSSLPGVLUYEVUDVCYISNNQPVLYFLAH 117  
61 KCNEFTMKVLYGYNLQMQRFAVEINNCSSLPGVLUYEVUDVCYISNNHPLQYFLAQ 120  
Db 118 EDNLPIQDYSYNSVIRRAVIGPDNSBSVMTVANLFLPQITSAISDELRDKRF 177  
121 DDPLIPKLYDYSQMPHVAIGPDNSBSVMTVANLFLPQITSAISDELRDKRF 180  
Query 178 PALLRTPSADHVEAMVQMLHFRWNNTIVLVSSTYGRUNQOLIGERVAR-RDICIAP 236  
121 DDPLIPKLYDYSQMPHVAIGPDNSBSVMTVANLFLPQITSAISDELRDKRF 180  
Db 181 PSMRRTVPSATHIEAMVQMLHFRWNNTIVLVSSTYGRUNQOLIGERVAR-RDICIAP 240  
Query 237 QETLPLTLQPNQNTSERQRLVTDKQOSTARVUVFSPDLTYHPPNVLRFNFTGA 296  
Db 241 QEVLPPIPESQVNSQMRSEBQDNLNLDKURRTSARUVVVFSPBLSLYSFHEVRWNFTGP 300  
Query 297 VVIASSESWAIDPVLHNLTELGHLGFLGIFTQVSRVSPGFSQFVRDKPCYPVPTNLR 356  
301 VVIASSESWAIDPVLHNLTELGHLGFLGIFTQVSRVSPGFSQFVRDKPCYPVPTNLR 360  
Db 357 YTCNOBCNCLNATLSFNTIRLRSGERVUVVSVSAYAVAHALHSLGCDKSTCKRUVY 416  
361 TTCHQDCACTNTKSFFNLILSGSERVSVSAYAVAHALHLGCHNRVRCIKQKVY 420  
Query 417 PWQLEEBIKWNFTLDHOFIFDPOGDVALLFELVQWQDRSQNPFQSVASYYPLQRLK 476  
421 PWQLEEBIKWNFTLGNRLFPDQGDMPMLDIDQWDLSONPFOSTASPTSKRLT 480  
Db 477 NIQDISHWNTNTIPMSMSKRCQCSQCKKEPVGIVHCCPFECIDCPLGFLNITEDEYEQ 536  
537 ACPPNNEWSYQSESETSCPKRQLVPLEHEAPTIAVALLAALGFLSTLAVLIVFWRHQTIV 596  
Db 541 SCFGSMWSYKQDITCFQRPFPLEHEVPTIVWAIALLGFFSTLAILFIFWRHQTIVM 600  
Query 597 RSAGGPMCFMLTLLVAVMWPVYVGPPKRVSTCLRCQALPCLCFNTCSCIAVRSQIV 656  
601 RSAGGPMCFMLVPLLLAFGNWVPGVPPFVSCFCRQAFPTVCFSCISCLCITVRSQIV 660  
Query 657 CAFKMSRFPPEAYSTWRYQGYPSMRAFTIYKLMVWIGMLARQSHP--RTDDPKI 714  
661 CVFKMARRLPLSSAYSFWMYHGPYFVAFITAIVKVALVGNMLA-TTINPIGRTPDDPNT 719  
Db 715 TIVSCPNVYRNLSLFTSDLLSUVGFSFAYMKGELPTNNNEAKPITSMFTYFTSSV 774  
720 MILSCHPNYRNGLURTSMLLISLUGFSAYMKGELPTNNNEAKPITSMFTYFTSSV 779  
Query 775 ICTEMNSAYSGVLUYVLLVYVNLIAISGYFGPKCYMILFYPERNTPAYFNSMIGYT 834  
780 ICTEMNSVHDGVLUVMDLLVIVNFLAGLGIGYFGPKCYMILFYPERNTSAYFNSMIGYT 839  
Query 835 MRR 837  
Db 840 MRK 842  
RESULT 12  
US-10-096-144-1  
; Sequence 1, Application US/10096144  
; Publication No. US20030102228A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Adler, Jon Elliot  
; APPLICANT: Lindemeyer, Juergen  
; APPLICANT: The Regents of the University of California

; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
; TITLE OF INVENTION: Involved in Sensory Transduction  
; FILE REFERENCE: 02307E-008720US  
; CURRENT APPLICATION NUMBER: US10/096,144  
; CURRENT FILING DATE: 2002-03-08  
; PRIORITY APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/361,631  
; PRIORITY FILING DATE: EARLIER FILING DATE: 1999-07-27  
; PRIORITY APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/095,464  
; PRIORITY FILING DATE: EARLIER FILING DATE: 1998-07-08  
; PRIORITY FILING DATE: EARLIER FILING DATE: 1998-12-17  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO: 1  
; LENGTH: 843  
; TYPE: PRT  
; ORGANISM: Rattus sp.  
; FEATURE:  
; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino  
; OTHER INFORMATION: acid sequence  
; US-10-096-144-1  
Query Match 72.1%; Score 3203.5; DB 14; Length 843;  
Best Local Similarity 70.6%; Pred. No. 1.1e-293; Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4; Query 1 MGPRAKTICSLFELWLAEP---AENSDPYLPDGYLGLGSLSHANNKGIVHLNPLQVP 57  
Db 1 MGPAQRTCLLISLLHLVKPGKLVENSDFHLAGDTLGGFLTLHANKSISHLQVP 60  
Query 118 EDNLPIQDYSYNSVIRRAVIGPDNSBSVMTVANLFLPQITSAISDELRDKRF 177  
121 DDPLIPKLYDYSQMPHVAIGPDNSBSVMTVANLFLPQITSAISDELRDKRF 180  
Db 181 PSMRRTVPSATHIEAMVQMLHFRWNNTIVLVSSTYGRUNQOLIGERVAR-RDICIAP 240  
Query 237 QETLPLTLQPNQNTSERQRLVTDKQOSTARVUVFSPDLTYHPPNVLRFNFTGA 296  
Db 241 QEVLPPIPESQVNSQMRSEBQDNLNLDKURRTSARUVVVFSPBLSLYSFHEVRWNFTGP 300  
Query 297 VVIASSESWAIDPVLHNLTELGHLGFLGIFTQVSRVSPGFSQFVRDKPCYPVPTNLR 356  
301 VVIASSESWAIDPVLHNLTELGHLGFLGIFTQVSRVSPGFSQFVRDKPCYPVPTNLR 360  
Db 357 YTCNOBCNCLNATLSFNTIRLRSGERVUVVSVSAYAVAHALHSLGCDKSTCKRUVY 416  
361 TTCHQDCACTNTKSFFNLILSGSERVSVSAYAVAHALHLGCHNRVRCIKQKVY 420  
Query 417 PWQLEEBIKWNFTLDHOFIFDPOGDVALLFELVQWQDRSQNPFQSVASYYPLQRLK 476  
421 PWQLEEBIKWNFTLGNRLFPDQGDMPMLDIDQWDLSONPFOSTASPTSKRLT 480  
Db 477 NIQDISHWNTNTIPMSMSKRCQCSQCKKEPVGIVHCCPFECIDCPLGFLNITEDEYEQ 536  
537 ACPPNNEWSYQSESETSCPKRQLVPLEHEAPTIAVALLAALGFLSTLAVLIVFWRHQTIV 596  
Db 541 SCFGSMWSYKQDITCFQRPFLEHEVPTIVWAIALLGFFSTLAILFIFWRHQTIVM 600  
Query 597 RSAGGPMCFMLTLLVAVMWPVYVGPPKRVSTCLRCQALPCLCFNTCSCIAVRSQIV 656  
601 RSAGGPMCFMLVPLLLAFGNWVPGVPPFVSCFCRQAFPTVCFSCISCLCITVRSQIV 660  
Query 657 CAFKMSRFPPEAYSTWRYQGYPSMRAFTIYKLMVWIGMLARQSHP--RTDDPKI 714  
661 CVFKMARRLPLSSAYSFWMYHGPYFVAFITAIVKVALVGNMLA-TTINPIGRTPDDPNT 719  
Db 715 TIVSCPNVYRNLSLFTSDLLSUVGFSFAYMKGELPTNNNEAKPITSMFTYFTSSV 774  
720 MILSCHPNYRNGLURTSMLLISLUGFSAYMKGELPTNNNEAKPITSMFTYFTSSV 779  
Query 775 ICTEMNSAYSGVLUYVLLVYVNLIAISGYFGPKCYMILFYPERNTPAYFNSMIGYT 834  
780 ICTEMNSVHDGVLUVMDLLVIVNFLAGLGIGYFGPKCYMILFYPERNTSAYFNSMIGYT 839  
Query 835 MRR 837  
Db 840 MRK 842  
RESULT 12  
US-10-096-144-1  
; Sequence 1, Application US/10096144  
; Publication No. US20030102228A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Adler, Jon Elliot  
; APPLICANT: Lindemeyer, Juergen  
; APPLICANT: The Regents of the University of California

QY 715 TVSCNENYRSLILENTSLDLILISVUGRSFAVNGKELPTNNEAKFTILSHMFYFTSSVS 774  
 Db 720 MISCHENYRNLNTSMDLILISVUGRSFAVNGKELPTNNEAKFTILSHMFYFTSSIS 779

QY 775 LCTFMSAISYGVLTIVDVLVTLVNLALIAISLGFGPKYCMILYPERNTPAFNSMCGYT 834  
 Db 780 LCTFMSVHDGVLTIMDLVTLVNLALIAISLGFGPKYCMILYPERNTSAVNSMCGYT 839

QY 835 MRR 837  
 Db 840 MRK 842

RESULT 13  
 US-10-246-785-6  
 ; Sequence 6, Application US/10246785  
 ; Publication No. US200301484481

GENERAL INFORMATION:  
 ; APPLICANT: IRM, LLC  
 ; APPLICANT: The Scripps Research Institute  
 ; APPLICANT: Liao, Jiayu  
 ; APPLICANT: Sheng, Ding  
 ; APPLICANT: Schulz, Peter G  
 ; TITLE OF INVENTION: Sweet Taste Receptors  
 ; FILE REFERENCE: 36-002810US/PC  
 ; CURRENT APPLICATION NUMBER: US/10/246, 785  
 ; CURRENT FILING DATE: 2002-12-09  
 ; PRIORITY APPLICATION NUMBER: US 60/323, 450  
 ; PRIORITY FILING DATE: 2001-09-18  
 ; NUMBER OF SEQ ID NOS: 22  
 ; SOFTWARE: Patentin version 3.1  
 ; SEQ ID NO 6  
 ; LENGTH: 413

; ORGANISM: *Rattus norvegicus*  
 ; US-10-246-785-6

Query Match 72.1%; Score 3203.5; DB 14; Length 843;  
 Best Local Similarity 70.6%; Pred. No. 1.1e-293;  
 Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

QY 1 MGPRAKTICSLFLMLWLAEP--AENSDFLVPGDYLGLGFLSHAMKGIVHNLFLQVP 57  
 Db 1 MGQPARTLCLSLLHLVLPKGKLVENSDFHLAGDYLGLGFLSHAMKGIVHNLFLQVP 60

QY 58 MCKEYEVKVGNLQMQRFAVEEINNDSSLPGVLGLEYTIVDVCYTSNNYQPVLYFLAH 117  
 Db 61 KCFNEFTMKVLAGNLQMQRFAVEEINNDSSLPGVLGLEYTIVDVCYTSNNYQPVLYFLAQ 120

QY 118 EDNLLPQDQDVKYNTISRVAVAVGPDNSESWMVANFLSFLFLPQTSASIDELRQYRF 177  
 Db 121 DDDDLPLIKDYSQMPHVAVGPDNSBSAITSVNLSHFLPQTSASIDKLDRKHF 180

QY 178 PALLRTPSADHVEAMVQMLHFRMMIVIYVSSDYGGRDNGQJLGERVAR-ROTCIAF 236  
 Db 181 PSMLRTPSATHTIEAMVQMLHFRMMIVIYVSSDYGGRDNGQJLGERVAR-ROTCIAF 240

QY 237 QETLPLTQPNQMTSEQRQLVITVDKLQSTARVVVFSPDLTLYHFFNEVLQNTGAA 296  
 Db 241 QSVLPIBESSQMRSEQRQLQNLIDGURRSARVVVFSPBLSISFFHFLURMFTGF 300

QY 297 VNIASESWAIDPVHLNLTEBLGHGTFLGTTOSVPGFSEPREWSQAOAGPPLSRTSOS 356  
 Db 301 VNIASESWAIDPVHLNLTEBLGHGTFLGTTOSVPGFSEPREWSQAOAGPPLSRTSOS 360

QY 357 YTCNQEDCNICMATSNTLULSLGERVWVSYTSAVVAHALHSLGDDSTCERWVY 416  
 Db 361 T'CNQDCAACTNTKSFLNLISLGERVWVSYTSAVVAHALHRLGCGNRVCTKQVY 420

QY 417 PNLQLEETWKVNLTDHQIFDPOGVALLHEIVQWQDSDQNPQFOSVASVYPLQK 476  
 Db 421 PWQLLREIWHVNFLLGNGRLLFDDQGDMRPMMLDQIQWQDLSQNPFQSIASYSPTSKRIT 480

RESULT 14  
 US-10-190-417-7  
 ; Sequence 7, Application US/10190417  
 ; Publication No. US2003166137A1

GENERAL INFORMATION:  
 ; APPLICANT: Ryba, Nicholas J. P.  
 ; APPLICANT: Chandrasekar, Jayaram  
 ; APPLICANT: Hoon, Mark A.  
 ; APPLICANT: Nelson, Greg  
 ; APPLICANT: Zuker, Charles S.  
 ; APPLICANT: Zhang, Yileng  
 ; APPLICANT: The Regents of the University of California  
 ; APPLICANT: The Government of the United States of America  
 ; APPLICANT: as represented by the Secretary of the  
 ; APPLICANT: Department of Health and Human Services  
 ; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste  
 ; TITLE OF INVENTION: Receptors  
 ; FILE REFERENCE: 023078-100130US  
 ; CURRENT APPLICATION NUMBER: US/10/190, 417  
 ; CURRENT FILING DATE: 2002-11-14  
 ; PRIORITY APPLICATION NUMBER: US 60/302, 898  
 ; PRIORITY FILING DATE: 2001-07-03  
 ; PRIORITY APPLICATION NUMBER: US 09/927, 315  
 ; PRIORITY FILING DATE: 2001-08-10  
 ; PRIORITY APPLICATION NUMBER: US 60/358, 925  
 ; PRIORITY FILING DATE: 2002-02-22  
 ; SOFTWARE: Patentin Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 843

; TYPE: PRT  
 ; ORGANISM: *Rattus norvegicus*  
 ; OTHER INFORMATION: rat TIR2  
 ; US-10-190-417-7

Query Match 72.1%; Score 3203.5; DB 14; Length 843;  
 Best Local Similarity 70.6%; Pred. No. 1.1e-293;  
 Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

QY 1 MGPRAKTICSLFLMLWLAEP--AENSDFLVPGDYLGLGFLSHAMKGIVHNLFLQVP 57  
 Db 1 MGQPARTLCLSLLHLVLPKGKLVENSDFHLAGDYLGLGFLSHAMKGIVHNLFLQVP 60



Search completed: May 11, 2004, 15:38:53  
Job time : 42.6604 secs

**THIS PAGE BLANK (U&PC)**





US-10-035-045-4  
; Sequence 4, Application US/10035045  
; Publication No. US200305448A1  
; GENERAL INFORMATION:  
; APPLICANT: ADLER, JON ELLIOT  
; APPLICANT: STASZEWSKI, LENA  
; APPLICANT: O'CONNELL, SHAWN  
; APPLICANT: ZOZULYA, SERGEY  
; TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME  
; FILE REFERENCE: 078003-0280681  
; CURRENT FILING DATE: 2002-01-03  
; PRIOR APPLICATION NUMBER: 60/259, 227  
; PRIOR FILING DATE: 2001-01-03  
; PRIOR APPLICATION NUMBER: 60/284, 547  
; PRIOR FILING DATE: 2001-04-19  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4  
; LENGTH: 852  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-10-035-045-4  
; QUERY Match 100%; Score 4524; DB 14; Length 852;  
; Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;  
; Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
; QY 1 MLGPAVIGLSIWALLHPTGAPLICLSQLRMKGDYVLLGGFLPGLGEAEAGLRSRTRPSSP 60  
; Db 61 VCTRESSNGLIWA LAMKMAVEEINNKS D L P G L R G D Y D F D T C S B P V A N K P S I M F L A K A 120  
; Qy 61 VCTRESSNGLIWA LAMKMAVEEINNKS D L P G L R G D Y D F D T C S B P V A N K P S I M F L A K A 120  
; Db 61 VCTRESSNGLIWA LAMKMAVEEINNKS D L P G L R G D Y D F D T C S B P V A N K P S I M F L A K A 120  
; Qy 121 GSRDIAYCNYTQOPRVLAVIGPHSSELAMVTGKFFSFFLMPQVSYGASME L S A R E T F 180  
; Db 121 GSRDIAYCNYTQOPRVLAVIGPHSSELAMVTGKFFSFFLMPQVSYGASME L S A R E T F 180  
; Qy 181 PSFRRTVPSDVRVQTLAELQEGFNNWVA L G S D E Y G R G C L S I F S A L A A R G I C I A H E 240  
; Db 181 PSFRRTVPSDVRVQTLAELQEGFNNWVA L G S D E Y G R G C L S I F S A L A A R G I C I A H E 240  
; Qy 241 GIVPLRADDRLKGQDYLQVNOQSVQVLFASVHAA L F N Y S I S S L S P K W A S 300  
; Db 241 GIVPLRADDRLKGQDYLQVNOQSVQVLFASVHAA L F N Y S I S S L S P K W A S 300  
; Qy 301 EAWLTSDDLVMG3LPGMAQMGTVLGFLORGQH E P Q V K T H L A T D P A F C S A L G E R Q 360  
; Db 301 EAWLTSDDLVMG3LPGMAQMGTVLGFLORGQH E P Q V K T H L A T D P A F C S A L G E R Q 360  
; Qy 361 I E D V V Q G R C P Q C D C T I L O N T S A G I N H O T I S V A A V Y S V A Q A L E N T I Q C N A S G C P A Q D 420  
; Db 361 I E D V V Q G R C P Q C D C T I L O N T S A G I N H O T I S V A A V Y S V A Q A L E N T I Q C N A S G C P A Q D 420  
; Qy 421 V K P W Q L E N M M N L T P F G G L P R F D S G N V M E D L K M W Q S V R L H D V G R F N S L T 480  
; Db 421 V K P W Q L E N M M N L T P F G G L P R F D S G N V M E D L K M W Q S V R L H D V G R F N S L T 480  
; Qy 481 E R L K R H W T S N Q K P V S R C S R C S Q C Q E G Q V R R K G F H S C C Y D C V D C E A G S Y R O N P D D A C T F 540  
; Db 481 E R L K R H W T S N Q K P V S R C S R C S Q C Q E G Q V R R K G F H S C C Y D C V D C E A G S Y R O N P D D A C T F 540  
; Qy 541 C Q D E M S P E R S T R C F R R S R R F R L A W G R P A V I L L I L I S L A I G V L A A L G F V H R D S P L V Q 600  
; Db 541 C Q D E M S P E R S T R C F R R S R R F R L A W G R P A V I L L I L I S L A I G V L A A L G F V H R D S P L V Q 600  
; Qy 601 A S G G P I A C F G V G L G V C L S T I F P Q S P R C L A Q P Q S P L I P C L S T I F Q A E I F V 660  
; Db 601 A S G G P I A C F G V G L G V C L S T I F P Q S P R C L A Q P Q S P L I P C L S T I F Q A E I F V 660  
; QY 661 E S E L P S W A D R L S G C I R G P M A W V I L L A M V E A L C T W I V A F P P E V T D H M L P T B A L V 720  
; Db 661 E S E L P S W A D R L S G C I R G P M A W V I L L A M V E A L C T W I V A F P P E V T D H M L P T B A L V 720  
; QY 721 H C R T R S W V S G L A H A T N A T A L F L C R I G T F L V R S Q P G C Y N R A G L T P A M L Y F T W S F V P 780  
; Db 721 H C R T R S W V S G L A H A T N A T A L F L C R I G T F L V R S Q P G C Y N R A G L T P A M L Y F T W S F V P 780  
; QY 781 L L A N Y Q V L R P A V Q M G A L L C V G L A F H P L P C V L M R O G L N P E F F G G P C D A Q S O 840  
; Db 781 L L A N Y Q V L R P A V Q M G A L L C V G L A F H P L P C V L M R O G L N P E F F G G P C D A Q S O 840  
; QY 841 N D G N T G N Q G K H E 852  
; Db 841 N D G N T G N Q G K H E 852

QY 241 GLVPLRADDRLRGKVQDVHVNQSSVQVILFASVHAAHALFNYSISSRLSPKVWAS 300  
 Db 241 GLVPLRADDRLRGKVQDVHVNQSSVQVILFASVHAAHALFNYSISSRLSPKVWAS 300  
 QY 301 EAWLTSSDLVMGLPGMAQMGTGLFQRLGQALHFPQVKTHLALATDPAFCALGEREQ 360  
 Db 301 EAWLTSSDLVMGLPGMAQMGTGLFQRLGQALHFPQVKTHLALATDPAFCALGEREQ 360  
 QY 361 LEEDVVGRCPOCDITLONVAGLNHQTSSVAVSYVAQLHNTLQCNASCPAQD 420  
 Db 361 LEEDVVGRCPOCDITLONVAGLNHQTSSVAVSYVAQLHNTLQCNASCPAQD 420  
 QY 421 VKPWOLLENMNLTFHVGGLPLRFDSGNYMEYDULKWWQSVPRHLVGRFNGSLT 480  
 Db 421 VKPWOLLENMNLTFHVGGLPLRFDSGNYMEYDULKWWQSVPRHLVGRFNGSLT 480  
 QY 481 ERLKIRWHTSDNQKPVSRCSRCQSCQEVRRKGFSCCYCYCVDCEAGSYRQNDDACTF 540  
 Db 481 ERLKIRWHTSDNQKPVSRCSRCQSCQEVRRKGFSCCYCYCVDCEAGSYRQNDDACTF 540  
 QY 541 CGODEWSPERSTRCFRRSRFLAWGEPAVILLLILSLALGVLVLAALGLFVHRSPLVQ 600  
 Db 541 CGODEWSPERSTRCFRRSRFLAWGEPAVILLLILSLALGVLVLAALGLFVHRSPLVQ 600  
 QY 601 ASGGPLACFGVCLGVLCLSTLFCQSPARCLAQQLPUSHLPLTGCLSTLFLQAEIV 660  
 Db 601 ASGGPLACFGVCLGVLCLSTLFCQSPARCLAQQLPUSHLPLTGCLSTLFLQAEIV 660  
 QY 661 ESEPLSWADRLSGLCIRGPWMLVLLVLLMLVEALCTWLYAFLPPEVVTDWHLPLTEALV 720  
 Db 661 ESEPLSWADRLSGLCIRGPWMLVLLVLLMLVEALCTWLYAFLPPEVVTDWHLPLTEALV 720  
 QY 721 HCRTRSWNSFLGLAHATNTAFLCFLGFLTFLRSQPGCYNRARGLTFLAMLAYFITVWSFVP 780  
 Db 721 HCRTRSWNSFLGLAHATNTAFLCFLGFLTFLRSQPGCYNRARGLTFLAMLAYFITVWSFVP 780  
 QY 781 LLANQVWLRPAVQMGALLCIVGLGILAAFLPLRCYLLMROGLNTPEFFLGGPDAQGQ 840  
 Db 781 LLANQVWLRPAVQMGALLCIVGLGILAAFLPLRCYLLMROGLNTPEFFLGGPDAQGQ 840  
 QY 841 NDGNTGNQKHE 852  
 Db 841 NDGNTGNQKHE 852

RESULT 5  
 US-10-292-798-602  
 ; Sequence 602, Application US/10292798  
 ; Publication No. US20030235833A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: SUWA, MAKIKO  
 ; APPLICANT: ASAI, KIYOSHI  
 ; APPLICANT: AKIYAMA, YUTAKA  
 ; APPLICANT: ABURATANI, HIROYUKI  
 ; TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS  
 ; CURRENT APPLICATION NUMBER: US/10/292,798  
 ; CURRENT FILING DATE: 2002-11-13  
 ; CURRENT APPLICATION NUMBER: 10/017,161  
 ; PRIOR FILING DATE: 2001-12-18  
 ; PRIOR APPLICATION NUMBER: JP 2001-246789  
 ; PRIOR FILING DATE: 2001-06-18  
 ; NUMBER OF SEQ ID NOS: 2070  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; LENGTH: 936  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-292-798-602

Query Match 100.0%; Score 4524; DB 15; Length 936;  
 Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLGPAVLGLSLWALLHPLG3TGAPLQLSQRIMKGDYVUGLGLPGLGABEAGLARSTRPSSP 60  
 Db 1 MLGPAVLGLSLWALLHPLG3TGAPLQLSQRIMKGDYVUGLGLPGLGABEAGLARSTRPSSP 60  
 QY 61 VCTRFSSNLILWALAMKMAVEEINKNSLIPGLRIGYLFDCSEPVAMKSIIMFLAKA 120  
 Db 61 VCTRFSSNLILWALAMKMAVEEINKNSLIPGLRIGYLFDCSEPVAMKSIIMFLAKA 120  
 QY 121 GSRTIAAKNYTOQPRULAVTGPBSSLAMYTGKFSSFLMQLQSYGASMEELSAERTF 180  
 Db 121 GSRTIAAKNYTOQPRULAVTGPBSSLAMYTGKFSSFLMQLQSYGASMEELSAERTF 180  
 QY 181 PSFRRTVPSDRVQTAABLLQERGWNNTAALGSDDEWGRQGLSISFSAARGCIAHE 240  
 Db 181 PSFRRTVPSDRVQTAABLLQERGWNNTAALGSDDEWGRQGLSISFSAARGCIAHE 240  
 QY 241 GLVPLRADDRLRGKVQDVHVNQSSVQVILFASVHAAHALFNYSISSRLSPKVWAS 300  
 Db 241 GLVPLRADDRLRGKVQDVHVNQSSVQVILFASVHAAHALFNYSISSRLSPKVWAS 300  
 QY 301 EAWLTSSDLVMGLPGMAQMGTGLFQRLGQALHFPQVKTHLALATDPAFCALGEREQ 360  
 Db 301 EAWLTSSDLVMGLPGMAQMGTGLFQRLGQALHFPQVKTHLALATDPAFCALGEREQ 360  
 QY 361 LEEDVVGRCPOCDITLONVAGLNHQTSSVAVSYVAQLHNTLQCNASCPAQD 420  
 Db 361 LEEDVVGRCPOCDITLONVAGLNHQTSSVAVSYVAQLHNTLQCNASCPAQD 420  
 QY 421 VKPWOLLENMNLTFHVGGLPLRFDSGNYMEYDULKWWQSVPRHLVGRFNGSLT 480  
 Db 421 VKPWOLLENMNLTFHVGGLPLRFDSGNYMEYDULKWWQSVPRHLVGRFNGSLT 480  
 QY 481 ERLKIRWHTSDNQKPVSRCSRCQSCQEVRRKGFSCCYCYCVDCEAGSYRQNDDACTF 540  
 Db 481 ERLKIRWHTSDNQKPVSRCSRCQSCQEVRRKGFSCCYCYCVDCEAGSYRQNDDACTF 540  
 QY 541 CGODEWSPERSTRCFRRSRFLAWGEPAVILLLILSLALGVLVLAALGLFVHRSPLVQ 600  
 Db 541 CGODEWSPERSTRCFRRSRFLAWGEPAVILLLILSLALGVLVLAALGLFVHRSPLVQ 600  
 QY 601 ASGGPLACFGVCLGVLCLSTLFCQSPARCLAQQLPUSHLPLTGCLSTLFLQAEIV 660  
 Db 601 ASGGPLACFGVCLGVLCLSTLFCQSPARCLAQQLPUSHLPLTGCLSTLFLQAEIV 660  
 QY 661 ESEPLSWADRLSGLCIRGPWMLVLLVLLMLVEALCTWLYAFLPPEVVTDWHLPLTEALV 720  
 Db 661 ESEPLSWADRLSGLCIRGPWMLVLLVLLMLVEALCTWLYAFLPPEVVTDWHLPLTEALV 720  
 QY 721 HCRTRSWNSFLGLAHATNTAFLCFLGFLTFLRSQPGCYNRARGLTFLAMLAYFITVWSFVP 780  
 Db 721 HCRTRSWNSFLGLAHATNTAFLCFLGFLTFLRSQPGCYNRARGLTFLAMLAYFITVWSFVP 780  
 QY 781 LLANQVWLRPAVQMGALLCIVGLGILAAFLPLRCYLLMROGLNTPEFFLGGPDAQGQ 840  
 Db 781 LLANQVWLRPAVQMGALLCIVGLGILAAFLPLRCYLLMROGLNTPEFFLGGPDAQGQ 840  
 QY 841 NDGNTGNQKHE 852  
 Db 841 NDGNTGNQKHE 852

RESULT 6  
 US-10-108-186-148  
 ; Sequence 148, Application US/10188186  
 ; Publication No. US20040029789A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Anderson et al.  
 ; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME  
 ; FILE REFERENCE: 21002-397C  
 ; CURRENT APPLICATION NUMBER: US/10/188, 186  
 ; CURRENT FILING DATE: 2002-07-02  
 ; PRIOR APPLICATION NUMBER: 60/303046

PRIOR FILING DATE: 2001-07-05  
 PRIOR APPLICATION NUMBER: 60/360814  
 PRIOR FILING DATE: 2002-03-01  
 PRIOR APPLICATION NUMBER: 60/303828  
 PRIOR FILING DATE: 2001-09-07  
 PRIOR APPLICATION NUMBER: 60/323380  
 PRIOR FILING DATE: 2001-09-19  
 PRIOR APPLICATION NUMBER: 60/361133  
 PRIOR FILING DATE: 2002-03-01  
 PRIOR APPLICATION NUMBER: 60/304016  
 PRIOR FILING DATE: 2001-07-09  
 PRIOR APPLICATION NUMBER: 60/304502  
 PRIOR FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: 60/305262  
 PRIOR FILING DATE: 2001-07-13  
 PRIOR APPLICATION NUMBER: 60/373881  
 PRIOR FILING DATE: 2002-04-19  
 PRIOR APPLICATION NUMBER: 60/305673  
 PRIOR FILING DATE: 2001-07-16  
 Remaining Prior Application data removed - See File Wrapper or PALM.  
 NUMBER OF SEQ ID NOS: 368  
 SOFTWARE: Custom  
 SEQ ID NO: 148  
 LENGTH: 852  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-188-186-148  
 Query Match 99.8%; Score 4517; DB 12; Length 852;  
 Best Local Similarity 99.9%; Pred. No. 0; Mismatches 1; Indels 0; Gaps 0;  
 Matches 851; Conservative 0;  
 Qy 1 MLGPAVIGLISIWLHPTGAPLCSQQLRKIGDYVIGGLPGLGEAEAGLRSRTPSSP 60  
 Db 1 MLGPAVIGLISIWLHPTGAPLCSQQLRKIGDYVIGGLPGLGEAEAGLRSRTPSSP 60  
 Qy 61 VCTRFSNGLIWLAMKMAVEEINNKSDLPLGLRGLYDFTCTSEPVAMKPSLMLAKA 120  
 Db 61 VCTRFSNGLIWLAMKMAVEEINNKSDLPLGLRGLYDFTCTSEPVAMKPSLMLAKA 120  
 Qy 121 GSRDIAYCNTOYOPRVLAVIGPHSSELAMVTGKSFSPFIMPOVSYGASMEILLSARETF 180  
 Db 121 GSRDIAYCNTOYOPRVLAVIGPHSSELAMVTGKSFSPFIMPOVSYGASMEILLSARETF 180  
 Qy 181 PSFERTVPSDVPVOLTAELQFEGNMWVAMLSDEBGRGLSTSALAMARGICIAHE 240  
 Db 181 PSFERTVPSDVPVOLTAELQFEGNMWVAMLSDEBGRGLSTSALAMARGICIAHE 240  
 Qy 241 GLVPLPRADDRLGKQDYLQVNLQVNSQVQVLLFASVHAHALFNYISRSRLSPKWA 300  
 Db 241 GLVPLPRADDRLGKQDYLQVNLQVNSQVQVLLFASVHAHALFNYISRSRLSPKWA 300  
 Qy 301 BAWLTSDDLVMLPGLPMAQMGTVLGFQRLAQHFRPOVKTHLALATDPARCSALGEREQ 360  
 Db 301 BAWLTSDDLVMLPGLPMAQMGTVLGFQRLAQHFRPOVKTHLALATDPARCSALGEREQ 360  
 Qy 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Db 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Qy 421 VKPWLQLENMNTLTFHVGGLPFDSSGNVMDYDJKLWVQGSVRLHDYGRFNGSLRT 480  
 Db 421 VKPWLQLENMNTLTFHVGGLPFDSSGNVMDYDJKLWVQGSVRLHDYGRFNGSLRT 480  
 Db 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Qy 481 ERLKIRHMTSNQKPSRCSCQEGQVRRYKGFHSCCYDCDCEAGSYRQNDDACTF 540  
 Db 481 ERLKIRHMTSNQKPSRCSCQEGQVRRYKGFHSCCYDCDCEAGSYRQNDDACTF 540  
 Qy 541 CGQDEWSPERSTRCRFRSRFLAWGEPAVLULLLISLALGIVLAALGLFTFHRSPLQ 600  
 Db 541 CGQDEWSPERSTRCRFRSRFLAWGEPAVLULLLISLALGIVLAALGLFTFHRSPLQ 600  
 Qy 601 ASGGPLACFGIVLGLVCLSVLFLPGQSPARCLAQQLSHPLTNGCLSTFLQAEIFV 660  
 Db 601 ASGGPLACFGIVLGLVCLSVLFLPGQSPARCLAQQLSHPLTNGCLSTFLQAEIFV 660  
 Qy 61 ESELPLSWADRLSGLRGLGMAWLWLMLMVEVALCTWIVAFPEVTDWMPTEALV 720  
 Db 61 ESELPLSWADRLSGLRGLGMAWLWLMLMVEVALCTWIVAFPEVTDWMPTEALV 720  
 Qy 721 HCRTRSWSFGLAHATNATIAFLCPLGLTFLVRSPQGCYMRARGLTFLMLAYFTWVFV 780  
 Db 721 HCRTRSWSFGLAHATNATIAFLCPLGLTFLVRSPQGCYMRARGLTFLMLAYFTWVFV 780  
 Qy 781 LLANQVIVRPAVONGALUICVGLAHLPRCYLMLPQGLNTPELFGGGDAQO 840  
 Db 781 LLANQVIVRPAVONGALUICVGLAHLPRCYLMLPQGLNTPELFGGGDAQO 840  
 Qy 841 NDGNTGNGQKIE 852  
 Db 841 NDGNTGNGQKIE 852  
 RESULT 7-338A-14  
 US-09-796-338A-14  
 Sequence 14, Application US/09796338A  
 ; Patent No. US200200151522A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Millennium Pharmaceuticals, Inc.  
 ; TITLE OF INVENTION: 1983, 52881, 2398, 45449, 50289, AND  
 ; TITLE OF INVENTION: 52877, NOVEL G PROTEIN-COUPLED RECEPTORS AND USES THEREFOR  
 ; FILE REFERENCE: 10448-020001  
 ; CURRENT FILING DATE: 2001-02-28  
 ; PRIOR APPLICATION NUMBER: US 60/186,059  
 ; NUMBER OF SEQ ID NOS: 26  
 ; SOFTWARE: FastSEQ for Windows Version 4.0  
 ; SEQ ID NO: 14  
 ; LENGTH: 852  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-796-338A-14  
 Query Match 99.7%; Score 4512; DB 9; Length 852;  
 Best Local Similarity 99.9%; Pred. No. 0; Mismatches 1; Indels 0; Gaps 0;  
 Matches 851; Conservative 0;  
 Qy 1 MLGPAVIGLISIWLHPTGAPLCSQQLRKIGDYVIGGLPGLGEAEAGLRSRTPSSP 60  
 Db 1 MLGPAVIGLISIWLHPTGAPLCSQQLRKIGDYVIGGLPGLGEAEAGLRSRTPSSP 60  
 Qy 61 VCTRFSNGLIWLAMKMAVEEINNKSDLPLGLRGLYDFTCTSEPVAMKPSLMLAKA 120  
 Db 61 VCTRFSNGLIWLAMKMAVEEINNKSDLPLGLRGLYDFTCTSEPVAMKPSLMLAKA 120  
 Qy 121 GSRDIAYCNTOYOPRVLAVIGPHSSELAMVTGKSFSPFIMPOVSYGASMEILLSARETF 180  
 Db 121 GSRDIAYCNTOYOPRVLAVIGPHSSELAMVTGKSFSPFIMPOVSYGASMEILLSARETF 180  
 Qy 181 PSFERTVPSDVPVOLTAELQFEGNMWVAMLSDEBGRGLSTSALAMARGICIAHE 240  
 Db 181 PSFERTVPSDVPVOLTAELQFEGNMWVAMLSDEBGRGLSTSALAMARGICIAHE 240  
 Qy 241 GLVPLPRADDRLGKQDYLQVNLQVNSQVQVLLFASVHAHALFNYISRSRLSPKWA 300  
 Db 241 GLVPLPRADDRLGKQDYLQVNLQVNSQVQVLLFASVHAHALFNYISRSRLSPKWA 300  
 Qy 301 BAWLTSDDLVMLPGLPMAQMGTVLGFQRLAQHFRPOVKTHLALATDPARCSALGEREQ 360  
 Db 301 BAWLTSDDLVMLPGLPMAQMGTVLGFQRLAQHFRPOVKTHLALATDPARCSALGEREQ 360  
 Qy 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Db 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Qy 421 VKPWLQLENMNTLTFHVGGLPFDSSGNVMDYDJKLWVQGSVRLHDYGRFNGSLRT 480  
 Db 421 VKPWLQLENMNTLTFHVGGLPFDSSGNVMDYDJKLWVQGSVRLHDYGRFNGSLRT 480  
 Db 361 LEEDVQGRQPCDITLQNSAGLNHQTWSVAVSYVAQALHNTLOCNSCPAQDP 420  
 Qy 481 ERLKIRHMTSNQKPSRCSCQEGQVRRYKGFHSCCYDCDCEAGSYRQNDDACTF 540  
 Db 481 ERLKIRHMTSNQKPSRCSCQEGQVRRYKGFHSCCYDCDCEAGSYRQNDDACTF 540  
 Qy 541 CGQDEWSPERSTRCRFRSRFLAWGEPAVLULLLISLALGIVLAALGLFTFHRSPLQ 600  
 Db 541 CGQDEWSPERSTRCRFRSRFLAWGEPAVLULLLISLALGIVLAALGLFTFHRSPLQ 600  
 Qy 601 ASGGPLACFGIVLGLVCLSVLFLPGQSPARCLAQQLSHPLTNGCLSTFLQAEIFV 660  
 Db 601 ASGGPLACFGIVLGLVCLSVLFLPGQSPARCLAQQLSHPLTNGCLSTFLQAEIFV 660



Matches	Best Local Similarity	Score	DB	Length
851; Conservative	99.9%;	Pred. No: 0;	1;	Indels 0; Gaps 0;
QY	0;	Mismatches 0;		
1 MLGPAVGLISWALLHPTGAPLCISQQLRMKGDYVLLGGLPFLGEAEAGLRSRTRPSSP	60			
1 MLGPAVGLISWALLHPTGAPLCISQQLRMKGDYVLLGGLPFLGEAEAGLRSRTRPSSP	60			
61 VCTRFSNSGLIWALAMKMAVEEINNSDLPGLRIGYDLPDTCSEPVWAKPSIMFLAKA	120			
61 VCTRFSNSGLIWALAMKMAVEEINNSDLPGLRIGYDLPDTCSEPVWAKPSIMFLAKA	120			
121 GSRDIAVCNYTQYQRVLAVIGPHSELAMNTGKFSFFLMPQVSYGASMELLSARETF	180			
121 GSRDIAVCNYTQYQRVLAVIGPHSELAMNTGKFSFFLMPQVSYGASMELLSARETF	180			
181 PSFRTVPSDRVOLTAELQFQVNWVAALGSDDBYGROGLSISFALSALARGICIAHE	240			
181 PSFRTVPSDRVOLTAELQFQVNWVAALGSDDBYGROGLSISFALSALARGICIAHE	240			
241 GLVPLRADDRLKGQDVQHVNQSVQVLFLASVHAAHALFNYISRSRSPKVWAS	300			
241 GLVPLRADDRLKGQDVQHVNQSVQVLFLASVHAAHALFNYISRSRSPKVWAS	300			
301 EAWLTSDLVGLPGMAQMGTVLGFQRLGAQHFRPOVYKTHLALATDPAFCSALGREGQ	360			
301 EAWLTSDLVGLPGMAQMGTVLGFQRLGAQHFRPOVYKTHLALATDPAFCSALGREGQ	360			
361 LEEDVQGRCQOCDCITLQVNSAGLHQFTSVAAVSYVAQALHNTLQCNASGCPAQDP	420			
361 LEEDVQGRCQOCDCITLQVNSAGLHQFTSVAAVSYVAQALHNTLQCNASGCPAQDP	420			
421 VKEPQOLLEMNYNLTFHVGGLPFRPSGNDFMEYDLKLMWQGSPLRHDVGRFNGSLRT	480			
421 VKEPQOLLEMNYNLTFHVGGLPFRPSGNDFMEYDLKLMWQGSPLRHDVGRFNGSLRT	480			
481 ERLKIRWHTSDNOKPVSRCRSCQOCQEQVRRVKGFFHSCCYDVCDEAGSYRQNPDDACTF	540			
481 ERLKIRWHTSDNOKPVSRCRSCQOCQEQVRRVKGFFHSCCYDVCDEAGSYRQNPDDACTF	540			
541 CGQDEWSPERSTRFRRSRFLANGEPAVULLLULSLAIGLFLVLAQLEIFV	600			
541 CGQDEWSPERSTRFRRSRFLANGEPAVULLLULSLAIGLFLVLAQLEIFV	600			
601 ASGGPLACFGVLCVGLVCLSVLFLPQSPARCLAQOPLSHPLTGCLSTFLQAEIFV	660			
601 ASGGPLACFGVLCVGLVCLSVLFLPQSPARCLAQOPLSHPLTGCLSTFLQAEIFV	660			
661 ESEPLSWADRLSCLRGPMWAWLVLVLLAMLVEVALCTWLVAFPEVWTDWMLPTEALV	720			
661 ESEPLSWADRLSCLRGPMWAWLVLVLLAMLVEVALCTWLVAFPEVWTDWMLPTEALV	720			
721 HCRTRSWISGLAHATNATLAFCLGFLTFLVRSQGCVNARGLTFAMILYLAYITWWSFVP	780			
721 HCRTRSWISGLAHATNATLAFCLGFLTFLVRSQGCVNARGLTFAMILYLAYITWWSFVP	780			
781 LLANVOVWLRPATOMGALLCVGIGLAAFLPRCYLMLQPGQMPERFLGGGDAQGQ	840			
781 LLANVOVWLRPATOMGALLCVGIGLAAFLPRCYLMLQPGQMPERFLGGGDAQGQ	840			
841 NDGNTGNOCKHE 852				
841 NDGNTGNOCKHE 852				
QY	0;	Mismatches 0;		
US-10-145-586-14				
Publication No. US20030138890A1				
GENERAL INFORMATION: Sequence 14, Application US/10145586				
APPLICANT: Alexandra Glucksmann, Maria				
APPLICANT: Silos-Santiago, Inmaculada				
APPLICANT: M. Galvin, Katherine				
APPLICANT: Weich, Nadine				
Best Local Similarity 99.7%; Score 4512; DB 14; Length 852;				
Matches	Best Local Similarity	Score	DB	Length
851; Conservative	99.9%;	Pred. No: 0;	1;	Indels 0; Gaps 0;
QY	0;	Mismatches 0;		
1 MLGPAVGLISWALLHPTGAPLCISQQLRMKGDYVLLGGLPFLGEAEAGLRSRTRPSSP	60			
1 MLGPAVGLISWALLHPTGAPLCISQQLRMKGDYVLLGGLPFLGEAEAGLRSRTRPSSP	60			
61 VCTRFSNSGLIWALAMKMAVEEINNSDLPGLRIGYDLPDTCSEPVWAKPSIMFLAKA	120			
61 VCTRFSNSGLIWALAMKMAVEEINNSDLPGLRIGYDLPDTCSEPVWAKPSIMFLAKA	120			
121 GSRDIAVCNYTQYQRVLAVIGPHSELAMNTGKFSFFLMPQVSYGASMELLSARETF	180			
121 GSRDIAVCNYTQYQRVLAVIGPHSELAMNTGKFSFFLMPQVSYGASMELLSARETF	180			
181 PSFRTVPSDRVOLTAELQFQVNWVAALGSDDBYGROGLSISFALSALARGICIAHE	240			
181 PSFRTVPSDRVOLTAELQFQVNWVAALGSDDBYGROGLSISFALSALARGICIAHE	240			
241 GLVPLRADDRLKGQDVQHVNQSVQVLFLASVHAAHALFNYISRSRSPKVWAS	300			
241 GLVPLRADDRLKGQDVQHVNQSVQVLFLASVHAAHALFNYISRSRSPKVWAS	300			
301 EAWLTSDLVGLPGMAQMGTVLGFQRLGAQHFRPOVYKTHLALATDPAFCSALGREGQ	360			
301 EAWLTSDLVGLPGMAQMGTVLGFQRLGAQHFRPOVYKTHLALATDPAFCSALGREGQ	360			
361 LEEDVQGRCQDCDCITLQVNSAGLHQFTSVAAVSYVAQALHNTLQCNASGCPAQDP	420			
361 LEEDVQGRCQDCDCITLQVNSAGLHQFTSVAAVSYVAQALHNTLQCNASGCPAQDP	420			
421 VKEPQOLLEMNYNLTFHVGGLPFRPSGNDFMEYDLKLMWQGSPLRHDVGRFNGSLRT	480			
421 VKEPQOLLEMNYNLTFHVGGLPFRPSGNDFMEYDLKLMWQGSPLRHDVGRFNGSLRT	480			
481 ERLKIRWHTSDNOKPVSRCRSCQOCQEQVRRVKGFFHSCCYDVCDEAGSYRQNPDDACTF	540			
481 ERLKIRWHTSDNOKPVSRCRSCQOCQEQVRRVKGFFHSCCYDVCDEAGSYRQNPDDACTF	540			
541 CGQDEWSPERSTRFRRSRFLANGEPAVULLLULSLAIGLFLVLAQLEIFV	600			
541 CGQDEWSPERSTRFRRSRFLANGEPAVULLLULSLAIGLFLVLAQLEIFV	600			
601 ASGGPLACFGVLCVGLVCLSVLFLPQSPARCLAQOPLSHPLTGCLSTFLQAEIFV	660			
601 ASGGPLACFGVLCVGLVCLSVLFLPQSPARCLAQOPLSHPLTGCLSTFLQAEIFV	660			
661 ESEPLSWADRLSCLRGPMWAWLVLVLLAMLVEVALCTWLVAFPEVWTDWMLPTEALV	720			
661 ESEPLSWADRLSCLRGPMWAWLVLVLLAMLVEVALCTWLVAFPEVWTDWMLPTEALV	720			
721 HCRTRSWISGLAHATNATLAFCLGFLTFLVRSQGCVNARGLTFAMILYLAYITWWSFVP	780			
721 HCRTRSWISGLAHATNATLAFCLGFLTFLVRSQGCVNARGLTFAMILYLAYITWWSFVP	780			

QY 781 LLANQVQLRAVQMGALLCUGLGLIAFLPHLPRCYLMLRQPLNTPEFLGGPGDAQGQ 840  
 Db 781 LLANQVQLRAVQMGALLCUGLGLIAFLPHLPRCYLMLRQPLNTPEFLGGPGDAQGQ 840

Qy 841 NDGNTGNQKHE 852  
 Db 841 NDGNTGNQKHE 852

RESULT 11  
 Sequence 90, Application US/10407079  
 Publication No. US20030215860A1  
 GENERAL INFORMATION:  
 APPLICANT: Millennium Pharmaceuticals, Inc.  
 APPLICANT: Gluckemann, Maria A.  
 APPLICANT: Silve-Santiago, Inmaculida  
 APPLICANT: Carroll, Joseph M.  
 APPLICANT: Galvin, Katherine M.  
 TITLE OF INVENTION: 4549, 50289, 52872 AND 26908 MOLECULES AND USES THEREFOR  
 FILE REFERENCE: MPI103-0510NM  
 CURRENT APPLICATION NUMBER: US/10/407,079  
 CURRENT FILING DATE: 2003-04-03  
 PRIOR APPLICATION NUMBER: US 10/226, 102  
 PRIOR FILING DATE: 2002-08-22  
 PRIORITY NUMBER: US 60/314, 041  
 PRIOR FILING DATE: 2001-08-22  
 PRIOR APPLICATION NUMBER: US 10/225, 094  
 PRIOR FILING DATE: 2002-08-21  
 PRIOR APPLICATION NUMBER: US 60/314, 185  
 PRIOR FILING DATE: 2001-08-22  
 PRIOR APPLICATION NUMBER: US 10/272, 417  
 PRIOR FILING DATE: 2002-10-15  
 PRIOR APPLICATION NUMBER: US 09/795, 338  
 PRIOR FILING DATE: 2001-03-28  
 PRIOR APPLICATION NUMBER: US 60/186, 059  
 PRIOR FILING DATE: 2000-02-29  
 Remaining Prior Application data removed - See File Wrapper or PALM.  
 NUMBER OF SEQ ID NOS: 110  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 ; SEQ ID NO 90  
 ; LENGTH: 852  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-10-407-079-90

Query Match 99.7%; Score 4512; DB 15; Length 852;  
 Best Local Similarity 99.9%; Pct. No.: 0; Mismatches 1; Indels 0; Gaps 0;  
 Matches 851; Conservative 0; MisMatches 1; Indels 0; Gaps 0;

Qy 1 MGPVAGLGLSWALLHPTGAPLCLSQQLNKGDXVUGGLPPLGEAEAGLRSRTRPSSP 60  
 Db 1 MGPVAGLGLSWALLHPTGAPLCLSQQLNKGDXVUGGLPPLGEAEAGLRSRTRPSSP 60

Qy 61 VCTRSSNGLWALAMKQAVETINNKSDLPLGRLRGYDFTCSCPVWAMPSMLAKA 120  
 Db 61 VCTRSSNGLWALAMKQAVETINNKSDLPLGRLRGYDFTCSCPVWAMPSMLAKA 120

Qy 121 GSRDIAYCNTOYOPRLVATGPSPSFLMPDPOYSGASMEISARETF 180  
 Db 121 GSRDIAYCNTOYOPRLVATGPSPSFLMPDPOYSGASMEISARETF 180

Qy 181 PSFRTVPSDQVOLTAELQEGNMWALGSDEYGRQLSFSALARGCIAHE 240  
 Db 181 PSFRTVPSDQVOLTAELQEGNMWALGSDEYGRQLSFSALARGCIAHE 240

RESULT 12  
 Sequence 7, Application US/10179373  
 Publication No. US2003022407A1  
 GENERAL INFORMATION:  
 APPLICANT: ZOLLER, MARK  
 APPLICANT: LI, XIAODONG  
 APPLICANT: STASZEWSKI, LEONA  
 APPLICANT: O'CONNELL, SHAWN  
 APPLICANT: ZOZULIA, SERGEY  
 APPLICANT: ADLER, JON  
 APPLICANT: XU, HONG  
 APPLICANT: ECHEVERRI, FERNANDO  
 TITLE OF INVENTION: TIR HETERO-OLIGOMERIC TASTE RECEPTORS AND CELL LINES  
 TITLE OF INVENTION: THAT EXPRESS SAID RECEPTORS AND USE THEREOF FOR  
 TITLE OF INVENTION: IDENTIFICATION OF TASTE COMPOUNDS  
 FILE REFERENCE: 078003-0291566  
 CURRENT APPLICATION NUMBER: US/10/179,373  
 CURRENT FILING DATE: 2002-05-26  
 PRIOR APPLICATION NUMBER: 60/300,434  
 PRIOR FILING DATE: 2001-06-26  
 PRIOR APPLICATION NUMBER: 60/304,749  
 PRIOR FILING DATE: 2001-07-13  
 PRIOR APPLICATION NUMBER: 60/310,493  
 PRIOR FILING DATE: 2001-08-08  
 PRIOR APPLICATION NUMBER: 60/331,771  
 PRIOR FILING DATE: 2001-11-21

Qy 241 GLVPLPRAODSRSLGKVQDVHQNQSSQVVLFLASVMAHALFNYTSSRLSPKVMAS 300  
 Db 241 GLVPLPRAODSRSLGKVQDVHQNQSSQVVLFLASVMAHALFNYTSSRLSPKVMAS 300

Qy 301 EAWLTSDDLYMGLPQMAQMGTVLFLQRLAQHLRPOYKTHLALATDIFCSALGERIQG 360  
 Db 301 EAWLTSDDLYMGLPQMAQMGTVLFLQRLAQHLRPOYKTHLALATDIFCSALGERIQG 360

Qy 361 LEDEVUGQRCPOCUDITQNSAGLNHOTFSYAAVSVAQALNTQCNASGCPADD 420  
 Db 361 LEDEVUGQRCPOCUDITQNSAGLNHOTFSYAAVSVAQALNTQCNASGCPADD 420

Qy 421 VKPMQLENNYNLTFHVGGLPLRDSSGNDVMDMEYDJKWVWQGSVPRLHDVGRPNGST 480  
 Db 421 VKPMQLENNYNLTFHVGGLPLRDSSGNDVMDMEYDJKWVWQGSVPRLHDVGRPNGST 480

Qy 481 ERLKIRWHTSDNQKEPSRSQLOEQQYRVRKGHSCCYDCVDCCEAGSYRQNDDACTP 540  
 Db 481 ERLKIRWHTSDNQKEPSRSQLOEQQYRVRKGHSCCYDCVDCCEAGSYRQNDDACTP 540

Qy 541 CGQDWSPERSTRCFERRSFLAWGEPAVULLLSSALGLVIAALGLVHHRDSPVQ 600  
 Db 541 CGQDWSPERSTRCFERRSFLAWGEPAVULLLSSALGLVIAALGLVHHRDSPVQ 600

Qy 601 ASGPPLACGLVCLGLVCLSVLUPGQSPARCLAQDPLSHLPLTCSTLQAEITFV 660  
 Db 601 ASGPPLACGLVCLGLVCLSVLUPGQSPARCLAQDPLSHLPLTCSTLQAEITFV 660

Qy 661 ESEPLSMDRLSCLRGPAWLVVLLMLVEALCTVYLVPPEVVTDWMLPTEALV 720  
 Db 661 ESEPLSMDRLSCLRGPAWLVVLLMLVEALCTVYLVPPEVVTDWMLPTEALV 720

Qy 721 HCRTRSWWSRGLATATLAFCLFLGFLPLRSQPGCNRAGLTPANLAYFTWSEVP 780  
 Db 721 HCRTRSWWSRGLATATLAFCLFLGFLPLRSQPGCNRAGLTPANLAYFTWSEVP 780

Qy 781 LLANQVQLRAVQMGALLCUGLGLIAFLPHLPRCYLMLRQPLNTPEFLGGPGDAQGQ 840  
 Db 781 LLANQVQLRAVQMGALLCUGLGLIAFLPHLPRCYLMLRQPLNTPEFLGGPGDAQGQ 840

Qy 841 NDGNTGNQKHE 852  
 Db 841 NDGNTGNQKHE 852

PRIOR APPLICATION NUMBER: 60/339,472  
 PRIOR FILING DATE: 2001-12-14  
 PRIOR APPLICATION NUMBER: 60/372,090  
 PRIOR FILING DATE: 2002-04-15  
 PRIOR APPLICATION NUMBER: 60/374,143  
 PRIOR FILING DATE: 2002-04-22  
 NUMBER OF SEQ ID NOS: 19  
 SEQ ID NO 7  
 LENGTH: 852  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-179-373-7  
 Query Match 99.7%; Score 4512; DB 15; Length 852;  
 Best Local Similarity 99.9%; Pred. No. 0; Mismatches 0; Gaps 0;  
 Matches 851; Conservative 0; Indels 0;  
 QY 1 MLGPAVLGLSILWALLHPTGAPLCLISQQLRKMGDKDYLGLGGLPGLGEAEAGLRSRTRPSSP 60  
 Db 1 MLGPAVLGLSILWALLHPTGAPLCLISQQLRKMGDKDYLGLGGLPGLGEAEAGLRSRTRPSSP 60  
 QY 61 VCTRSSNGLWALAMKMAVEINNKSDLPLGLRGLGDPLTCSEBVAMKPSIMFLAKA 120  
 Db 61 VCTRSSNGLWALAMKMAVEINNKSDLPLGLRGLGDPLTCSEBVAMKPSIMFLAKA 120  
 QY 121 GSRDIAYCNTOQOPRVLAVIGPHSELAMNTGKPFSSFLMPQVSYGAESMELISARETF 180  
 Db 121 GSRDIAYCNTOQOPRVLAVIGPHSELAMNTGKPFSSFLMPQVSYGAESMELISARETF 180  
 QY 181 PSFERTVPSDRSRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 Db 181 PSFERTVPSDRSRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 QY 241 GLVPLPRADDRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 Db 241 GLVPLPRADDRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 QY 301 EAWLTSDDLVNGLPGMAQMGTVLGFLORGQHLHERPQVKTHLALATPACSALEBREGQ 360  
 Db 301 EAWLTSDDLVNGLPGMAQMGTVLGFLORGQHLHERPQVKTHLALATPACSALEBREGQ 360  
 QY 361 LEEDVUGQRCQCDCTLQNSAGLNHQTTSVAAVSVQALANTLQCNAGSCPAQP 420  
 Db 361 LEEDVUGQRCQCDCTLQNSAGLNHQTTSVAAVSVQALANTLQCNAGSCPAQP 420  
 QY 421 VPKWOLLENMNLTFANGGLPLRFDSSGNVIMBYDKLWWQGSVIRLHDVGRFNGSLRT 480  
 Db 421 VPKWOLLENMNLTFANGGLPLRFDSSGNVIMBYDKLWWQGSVIRLHDVGRFNGSLRT 480  
 QY 481 ERLKLRWHTSPSNOKPVSRCSCSQCQESQVRRTGFHSCCYPDCBEGSYRQNPDDACTF 540  
 Db 481 ERLKLRWHTSPNOKPVSRCSCSQCQESQVRRTGFHSCCYPDCBEGSYRQNPDDACTF 540  
 QY 541 CGQDENSPERSTCRFRRSRFLAWGPAVILLIILSLAIGLFLHRHSPLQ 600  
 Db 541 CGQDENSPERSTCRFRRSRFLAWGPAVILLIILSLAIGLFLHRHSPLQ 600  
 QY 601 ASGGPLACFGVLCGLVCLSLFLPGQSPARCLAQQLPLSLPGLCLSTIFLQABIFV 660  
 Db 601 ASGGPLACFGVLCGLVCLSLFLPGQSPARCLAQQLPLSLPGLCLSTIFLQABIFV 660  
 QY 661 ESEPLPSWADRLSGLPGPWAFLVVLMLYFVALCTWLYAFPREPVUTDPMHMLTEALV 720  
 Db 661 ESEPLPSWADRLSGLPGPWAFLVVLMLYFVALCTWLYAFPREPVUTDPMHMLTEALV 720  
 QY 721 HCRTSWSWSEGLAHATNATLRLFGLTFLURSQCPCYNNARGLFAMILYFITWSFV 780  
 Db 721 HCRTSWSWSEGLAHATNATLRLFGLTFLURSQCPCYNNARGLFAMILYFITWSFV 780  
 QY 781 LLANVQVLRPQVOMGALLCULGILAAFHPRCYLIMRQGLNTPEFFLGGGPGDAQGQ 840  
 Db 781 LLANVQVLRPQVOMGALLCULGILAAFHPRCYLIMRQGLNTPEFFLGGGPGDAQGQ 840

RESULT 13  
 US-10-280-183A-5  
 Sequence 5, Application US/10280183A  
 Publication No. US20040081964A1  
 GENERAL INFORMATION:  
 APPLICANT: Pfizer Inc.  
 APPLICANT: Bachmanov, Alexander A.  
 APPLICANT: Beauramp, Gary K.  
 APPLICANT: Chatterjee, Autobindo  
 APPLICANT: De Jong, Pieter J.  
 APPLICANT: Li, Shanru  
 APPLICANT: Ohmen, Jeffrey D.  
 APPLICANT: Reed, Danielle R.  
 APPLICANT: Ross, David  
 APPLICANT: Toroff, Michael G.  
 TITLE OF INVENTION: CARBOHYDRATE COMPOUNDS AND OTHER SWEETERS  
 FILE REFERENCE: PC18-06A  
 CURRENT APPLICATION NUMBER: US/10/280,183A  
 PRIOR APPLICATION NUMBER: 60/200,794  
 PRIOR FILING DATE: 2000-04-28  
 NUMBER OF SEQ ID NOS: 652  
 SOFTWARE: PatentIn Ver. 3.1  
 SEQ ID NO 5  
 LENGTH: 852  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-280-183A-5  
 Query Match 99.7%; Score 4509; DB 16; Length 852;  
 Best Local Similarity 99.8%; Pred. No. 0; Mismatches 1; Gaps 0;  
 Matches 850; Conservative 1; Indels 0;  
 QY 1 MLGPAVLGLSILWALLHPTGAPLCLISQQLRKMGDKDYLGLGGLPGLGEAEAGLRSRTRPSSP 60  
 Db 1 MLGPAVLGLSILWALLHPTGAPLCLISQQLRKMGDKDYLGLGGLPGLGEAEAGLRSRTRPSSP 60  
 QY 61 VCTRSSNGLWALAMKMAVEINNKSDLPLGLRGLGDPLTCSEBVAMKPSIMFLAKA 120  
 Db 61 VCTRSSNGLWALAMKMAVEINNKSDLPLGLRGLGDPLTCSEBVAMKPSIMFLAKA 120  
 QY 121 GSRDIAYCNTOQOPRVLAVIGPHSELAMNTGKPFSSFLMPQVSYGAESMELISARETF 180  
 Db 121 GSRDIAYCNTOQOPRVLAVIGPHSELAMNTGKPFSSFLMPQVSYGAESMELISARETF 180  
 QY 181 PSFERTVPSDRSRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 Db 181 PSFERTVPSDRSRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 QY 241 GLVPLPRADDRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 Db 241 GLVPLPRADDRLKGQDVQVHQVNOSSVQVVLFLASVHAAHALFNYSISRLSPKUWAS 300  
 QY 301 EAWLTSDDLVNGLPGMAQMGTVLGFLORGQHLHERPQVKTHLALATPACSALEBREGQ 360  
 Db 301 EAWLTSDDLVNGLPGMAQMGTVLGFLORGQHLHERPQVKTHLALATPACSALEBREGQ 360  
 QY 361 LEEDVUGQRCQCDCTLQNSAGLNHQTTSVAAVSVQALANTLQCNAGSCPAQP 420  
 Db 361 LEEDVUGQRCQCDCTLQNSAGLNHQTTSVAAVSVQALANTLQCNAGSCPAQP 420  
 QY 421 VPKWOLLENMNLTFANGGLPLRFDSSGNVIMBYDKLWWQGSVIRLHDVGRFNGSLRT 480  
 Db 421 VPKWOLLENMNLTFANGGLPLRFDSSGNVIMBYDKLWWQGSVIRLHDVGRFNGSLRT 480

RESULT 14  
US-09-799-629-4  
; Sequence 4, Application US/09799629  
; Publication No. US20030008344A1  
; GENERAL INFORMATION:  
; APPLICANT: ADLER, JON ELLIOT  
; APPLICANT: ZOSULYA, SERGEY  
; APPLICANT: LI, XIAODONG  
; APPLICANT: O'CONNELL, SHAWN  
; APPLICANT: STASZEWSKI, LENA  
TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME  
FILE REFERENCE: 078003/0277870RXX  
CURRENT APPLICATION NUMBER: US09/799,629  
CURRENT FILING DATE: 2001-03-07  
PRIOR APPLICATION NUMBER: 60/187,546  
PRIOR FILING DATE: 2000-03-07  
PRIOR APPLICATION NUMBER: 60/195,536  
PRIOR FILING DATE: 2000-04-07  
PRIOR APPLICATION NUMBER: 60/209,840  
PRIOR FILING DATE: 2000-05-06  
PRIOR APPLICATION NUMBER: 60/214,213  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/226,448  
PRIOR FILING DATE: 2000-08-17  
PRIOR APPLICATION NUMBER: 60/259,227  
PRIOR FILING DATE: 2001-01-03  
NUMBER OF SEQ ID NOS: 20  
SOFTWARE: PatentIn Ver.: 2.1  
SEQ ID NO: 4  
LENGTH: 850  
TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-799-629-4

Query Match 99.5%; Score 4500; DB 10; Length 850;  
Best Local Similarity 99.6%; Bred. No. 0;  
Matches 849; Conservative 0; Mismatches 1; Indels 2; Gaps 1;

QY 1 MIGPAVLGLISWALLHPGTGAPLCLSQQLRMRKGDWVLLGGRPLGAAEAGLRSRTRPSSP 60  
Db 1 MIGPAVLGLISWALLHPGTGAPLCLSQQLRMRKGDWVLLGGRPLGAAEAGLRSRTRPSSP 60  
QY 61 VCTRSSNGLWALAMKMAVEEINNSKSLPGLRGVLDFTCSEPVAMKPSLMFLAKA 120

Db 61 VCTRSSNGLWALAMKMAVEEINNSKSLPGLRGVLDFTCSEPVAMKPSLMFLAKA 120  
Db 121 GSRDIAAYCNYTOQPRVIAVIGHPHSSPERSTRCRRSRFLAWEPAVLILLISLALGVLVLAALGLFVHRSPLVQ 540  
Db 121 GSRDIAAYCNYTOQPRVIAVIGHPHSSPERSTRCRRSRFLAWEPAVLILLISLALGVLVLAALGLFVHRSPLVQ 540  
Db 541 CGQDEBWSPERSTRCRRSRFLAWEPAVLILLISLALGVLVLAALGLFVHRSPLVQ 600  
Db 601 ASGGPLACFGVCLVCLSVLFLPQSPARCLAOQPLSHPLTGCLSTFLQAEFV 660  
Db 601 ASGGPLACFGVCLVCLSVLFLPQSPARCLAOQPLSHPLTGCLSTFLQAEFV 660  
QY 661 ESEPLSWADRLSGCLRGFLVCLSVLFLPQSPARCLAOQPLSHPLTGCLSTFLQAEFV 600  
Db 661 ESEPLSWADRLSGCLRGFLVCLSVLFLPQSPARCLAOQPLSHPLTGCLSTFLQAEFV 600  
Db 721 HCRTRSWSWGLAHATNATLAFCLFLGTFLVRSPQGCYNRARGLTFLAMLAYFITWVSFV 780  
Db 721 HCRTRSWSWGLAHATNATLAFCLFLGTFLVRSPQGCYNRARGLTFLAMLAYFITWVSFV 780  
Db 720 LLANQVWLRPAVOMGALLICVVLGILAAFLPHLPRCYLLMRQPLGNTPEFLGGPDAQGQ 840  
QY 781 LLANQVWLRPAVOMGALLICVVLGILAAFLPHLPRCYLLMRQPLGNTPEFLGGPDAQGQ 840  
Db 841 NDGNTGNQKHE 852  
Db 841 NDGNTGNQKHE 852

RESULT 15  
US-10-190-417-30  
; Sequence 30, Application US/10190417  
; Publication No. US20030166137A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Ryba, Nicholas J. P.  
; APPLICANT: Chandrasekhar, Jayaram  
; APPLICANT: Hoon, Mark A.  
; APPLICANT: Nelson, Greg  
; APPLICANT: Zhang, Yifeng  
; APPLICANT: The Regent of the University of California  
; APPLICANT: The Government of the United States of America  
; APPLICANT: as represented by the Secretary of the  
; APPLICANT: Department of Health and Human Services  
TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste  
FILE REFERENCE: 02307E-120130US

CURRENT APPLICATION NUMBER: US/10/190,417  
 CURRENT FILING DATE: 2002-11-14  
 PRIOR APPLICATION NUMBER: US 60/302,898  
 PRIOR FILING DATE: 2001-07-03  
 PRIOR APPLICATION NUMBER: US 09/927,315  
 PRIOR FILING DATE: 2001-08-10  
 PRIOR APPLICATION NUMBER: US 60/358,925  
 PRIOR FILING DATE: 2002-02-22  
 NUMBER OF SEQ ID NOS: 30  
 SOFTWARE: Patentin Ver. 2.1  
 SEQ ID NO: 30  
 LENGTH: 850  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 FEATURE:  
 OTHER INFORMATION: human TIR3  
 US-10-190-417-30

Query Match 99.5%; Score 4500; DB 14; Length 850;

BEST LOCAL SIMILARITY 99.6%; Pred. No. 0; Mismatches 1; Indels 2; Gaps 1;  
 Matches 849; Conservative 99.6%; Pred. No. 0; Mismatches 1; Indels 2; Gaps 1;

QY 1 MIGPAVIGLISWALLHPGTGAPLCLUSQQLRKGDYVLLGGIFPLGEAEAGIERSRTRPSSP 60  
 Db 1 MIGPAVIGLISWALLHPGTGAPLCLUSQQLRKGDYVLLGGIFPLGEAEAGIERSRTRPSSP 60  
 Qy 61 VCTRFSSNGLIWALAMKMAVIBINNKSDLIPRLGRGDLFDTCSGPVWAMKPSLMPFLAKA 120  
 Db 61 VCTRFSSNGLIWALAMKMAVIBINNKSDLIPRLGRGDLFDTCSGPVWAMKPSLMPFLAKA 120  
 Qy 121 GSRRDIAYCNTQYQPRVLAVTGPHSSBLANTGKERSFFMPQVSYGASMEILSARETF 180  
 Db 121 GSRRDIAYCNTQYQPRVLAVTGPHSSBLANTGKERSFFMPQVSYGASMEILSARETF 180  
 Qy 181 PSFRTVPSDRVQTLAAELIQBFGNNWAALGSDDEYGRQCLTSFSLAAJARGICIAHE 240  
 Db 179 PSFRTVPSDRVQTLAAELIQBFGNNWAALGSDDEYGRQCLTSFSLAAJARGICIAHE 238  
 Qy 241 GIVPLPRADDRLGKVQDVLQVNOSSVQVVLFAVHAAHALFNSISSRLSPKVWAS 300  
 Db 241 GIVPLPRADDRLGKVQDVLQVNOSSVQVVLFAVHAAHALFNSISSRLSPKVWAS 298  
 Qy 239 GIVPLPRADDRLGKVQDVLQVNOSSVQVVLFAVHAAHALFNSISSRLSPKVWAS 298  
 Db 301 EAWLTSIDLWGLPQGMQMGTVLQFQGAQHFPQYKTHLADTPACCSALGEREG 360  
 Qy 299 EAWLTSIDLWGLPQGMQMGTVLQFQGAQHFPQYKTHLADTPACCSALGEREG 358  
 Db 361 LEEDVVGQRCQDCDCTLQVNQASAGLNHHQTSSVVAAVSYVAQALANTLQCNASCPAQDP 420  
 Qy 359 LEEDVVGQRCQDCDCTLQVNQASAGLNHHQTSSVVAAVSYVAQALANTLQCNASCPAQDP 418  
 Db 421 VKPWOLLENMNLTEFHVGGLPLRFDSSGNVMDYDLKWWQGSVPRLHDVGRFNGSLRT 480  
 Qy 419 VKPWOLLENMNLTEFHVGGLPLRFDSSGNVMDYDLKWWQGSVPRLHDVGRFNGSLRT 478  
 Db 481 ERLKIRWHTSNDQKPYRSRCSQOCGQVRKRGFISCCYDCEAGSYKQNPDDACTF 540  
 Qy 479 ERLKIRWHTSNDQKPYRSRCSQOCGQVRKRGFISCCYDCEAGSYKQNPDDACTF 538  
 Db 541 GQDDENSPERSTRCFRRSRRLAWGEPAVLLLISLALGVLAAALGLFVRHRDSPVQ 600  
 Qy 539 GQDDENSPERSTRCFRRSRRLAWGEPAVLLLISLALGVLAAALGLFVRHRDSPVQ 598  
 Db 601 ASGGPLACFGIVCLGLVCLSTLUFPSQSPARCLAOPLSLPRLTCCLSTFLQAEIFV 660  
 Qy 599 ASGGPLACFGIVCLGLVCLSTLUFPGQSPARCLAOPLSLPRLTCCLSTFLQAEIFV 658  
 Db 661 ESEPLPSWADLUSGCGRCRGPMWLVLLAMLUPEVALLAAPPVWTHMLPTEALV 720  
 Qy 659 ESEPLPSWADLUSGCGRCRGPMWLVLLAMLUPEVALLAAPPVWTHMLPTEALV 718  
 Db 721 HCRTTRSWVSFLAHATNATLALCFLAGFLVRSQPGCYNRARGLTAMLAYFITWNSFVP 780  
 Qy 719 HCRTTRSWVSFLAHATNATLALCFLAGFLVRSQPGCYNRARGLTAMLAYFITWNSFVP 778

QY 781 LLIANYQVVLRAVQMGALLCIVLGLTIAFHFLPRLCYLMLMROGQNTPEFFLGGGPDADQ 840  
 Db 779 LLIANYQVVLRAVQMGALLCIVLGLTIAFHFLPRLCYLMLMROGQNTPEFFLGGGPDADQ 838  
 QY 841 NDGNTGNGRHE 852  
 Db 839 NDGNTGNGRHE 850

Search completed: May 11, 2004, 15:38:56  
 Job time : 44.3396 secs

**THIS PAGE BLANK (USPTO)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using SW model

Run on: May 11, 2004, 15:24:27 ; Search time 19:1574 Seconds  
(without alignments)  
2995.997 Million cell updates/sec

Title: US-09-927-315-15

Perfect score: 4524

Sequence: 1 MLGPAVIGLSLWALLHPRSTG.....GPGDAQCONGDNTGNQKHE 852

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*

1: /cgn2\_6/prodata2/1aa/5A\_COMB.pep: \*  
2: /cgn2\_6/prodata2/1aa/5B\_COMB.pep: \*  
3: /cgn2\_6/prodata2/1aa/6A\_COMB.pep: \*  
4: /cgn2\_6/prodata2/1aa/6B\_COMB.pep: \*  
5: /cgn2\_6/prodata2/1aa/PCRTUS\_COMB.pep: \*  
6: /cgn2\_6/prodata2/1aa/backfiles1.pep: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1089.5	24.1	1059	3	US-09-134-513-2
2	1068.5	23.6	1078	1	US-08-484-555-7
3	1068.5	23.6	1078	1	US-08-484-555-7
4	1068.5	23.6	1078	1	US-08-480-721-7
5	1068.5	23.6	1078	2	US-08-943-966-5
6	1068.5	23.6	1078	3	US-08-353-764-7
7	1068.5	23.6	1078	3	US-08-484-719B-7
8	1068.5	23.6	1078	4	US-08-484-159-5
9	1060	23.4	1085	1	US-08-485-588-5
10	1060	23.4	1085	1	US-08-484-551-5
11	1060	23.4	1085	2	US-08-943-966-5
12	1060	23.4	1085	2	US-08-553-764-5
13	1060	23.4	1085	3	US-08-484-719B-5
14	1060	23.4	1085	3	US-08-484-779B-5
15	1060	23.4	1088	1	US-08-484-159-5
16	1057.5	23.4	1088	1	US-08-485-588-6
17	1057.5	23.4	1088	1	US-08-484-555-6
18	1057.5	23.4	1088	2	US-08-480-721-6
19	1057.5	23.4	1088	2	US-08-943-966-6
20	1057.5	23.4	1088	3	US-08-353-764-6
21	1057.5	23.4	1088	3	US-08-484-719B-6
22	1057.5	23.4	1088	4	US-08-484-159-6
23	1056	23.3	1027	2	US-09-162-021B-2
24	1054	23.3	1079	1	US-08-485-588-8
25	1054	23.3	1079	1	US-08-484-555-8
26	1054	23.3	1079	2	US-08-480-721-8
27	1054	23.3	1079	2	US-08-943-986-8

ALIGNMENTS

RESULT 1  
US-09-134-513-2  
Sequence 1, Application US/09134513  
; Parent No. 6210964  
; GENERAL INFORMATION:  
; APPLICANT: Brown, Edward M.  
; APPLICANT: Diaz, Ruben  
; APPLICANT: Bai, Mei  
; APPLICANT: Quinn, Stephen J.  
; TITLE OF INVENTION: The Avian Extracellular Calcium-Sensing Receptor  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESSE: Vinson & Elkins L.L.P.  
; STREET: 1455 Pennsylvania Avenue, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: U.S.  
; ZIP: 20004-1008  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/134,513  
; FILING DATE:  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Sanzo, Michael A.  
; REGISTRATION NUMBER: 36,912  
; REFERENCE/DOCKET NUMBER: BRI331/13003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 639-6585  
; TELEFAX: (202) 639-6604  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1059 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: not relevant  
; TOPOLOGY: not relevant  
; MOLECULE TYPE: protein  
; HYPOTHETICAL: NO  
; US-09-134-513-2

Query Match 24.1%; Score 1089.5; DB 3; Length 1059;  
Best Local Similarity 30.4%; Pred. No. 2.4e-95; Indels 103; Gaps 23;  
Matches 266; Conservative 157; Mismatches 350;

ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA

C2IPI: 90071

COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/485,588  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 PRIOR APPLICATION DATA: described below: 9

APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994

APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994

APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994

APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993

APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993

APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993

APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992

APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992

APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991

ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REGISTRATION NUMBER: 213/005

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: 67-3510  
 TELE: 67-3510

INFORMATION FOR SEQ ID NO: 7:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1078 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein

US-08-485-588-7

RESULT 2

Query Match 23.6%; Score 1060.5; DB 1; Length 1078;  
 Best Local Similarity 30.3%; Pred. No. 2.6e-93;  
 Matches 269; Conservative 156; Mismatches 366; Indels 97; Gaps 26;  
 Score 1060.5; DB 1; Length 1078;

Qy 12 WALL---HPTGTGAPLCLSQLRMRQKMDYVIGLFLPLG---EAEAGLRSRTRPSSPVCTR 64

Qy 8 WLLWLTWHTSSAYGE---DORAKKEDDINGGLPPIHFGVAKODDLKS--RPESVECIR 62

Qy 65 FSSNGLWLWALMKMVAEETINNSKSLPGLGRLGGLDPLDTCSEPVVAKPSSLMFLA--KAGS 122

Db 63 YNFRGFRWLMQAMIAFEEINSPALLPNLTGTYRIFTDCTNTVSKALEATLSFVAONKIDS 122

Qy 123 RDIAAYCNYYQPYPLAVIGPHSSELAMTGTKEFSSFLMPQVSYGAHMLLSARETPPS 182

Db 123 LNLDFFCNCSEHIFTIATVAGTGSGVSTAVANLGLFYIPQVSASSRLSINQNQKS 182

Qy 183 FRTWPSDRVLTAAELQEFGRWVVAALGSDDBYGRGQLSISFSLAMARAGCIAHEGL 242

Db 183 FLRTIPNDERQATAMADIEYFRMWNGTIAADDYGRGEGEKEKREBEEFRIDCIDS 242

SEQUENCE 7, Application US/08485588  
 Patent No. 5689338  
 GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: Forrest H. Fuller  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:



Db 417 SYNVVLAIVSIAHALQDIDTCLPGRLFTNGS-CADTKVVEAWQVQLHLHNFNNMG 475  
 Qy 441 PLRFDSGGNVMDMEYDLKLW--VWQGSVPRHLVGREN-GSLTERL---KIRWHTSD 491  
 Db 476 QVTDFECDGLVGNYSITINWHSPEGSIV-FKEVGYVNVYAKKERLFINNEKILWSGS 534  
 Qy 492 NOKPVVERCSRCRQEGQYR-VKGFRSCCYDVCDEASGSYRNPNDDFACTFCQGQDWSPER 550  
 Db 535 RBPFSNCSDRCLAGTRKIGEPTCCFECVCPDGEYSDETASACNCPDDFWSNEN 594  
 Qy 551 STRCFRRRSRLAWGPAVLLLISLALGIVLAALGLFVHRSPLVQASGGFLA--- 607  
 Db 595 HTSCIKEIEFLSWTEPFGIAILTFAVGLTFLTAFTVGLVGFKFRNTPIVKATRNLSYL 654  
 Qy 608 CFGLVCLGLVCL-SVLLFPGGSPPARCLAOQPLSHLPLTCGLUSTFLQAAIBIV--ESEL 664  
 Db 655 LFSLLC---CPSSSLPFIGEPODWTCLRLRQPAFGISVLUCLVKTRVNLVPEAKI 710  
 Qy 665 PLS---WARISSCIRGPMAWVLLAMMVEAVALCTWVIAFPBEWVTDWMPTEA 719  
 Db 711 PTSFHKKWGLNLQ---PLLVPLCTMOTIVCIVWLYTAPSSYRNQELDEBF 762  
 Qy 720 WHCRTSWVSGLAHATNATIAFLCLGTFEVRSQPGCYNARGLFAMIAKIFTWWSFV 779  
 Db 763 ITCHESGLMAGFLIGLYTCLAAICFFAFKSRSKUPENENAKFTPSMIFTWISFI 822  
 Qy 780 PLLANQVVLPAVONGALLTCVLGLIAFLHPRCYLLMRQPLGNPTE 827  
 Db 823 PAYASITYGKFWSAVETAILMASFGFLACIFFNKTYIILFFPSRNTE 870

RESULT 4  
 US-08-480-751-7  
 ; Sequence 7, Application US/08480751  
 ; Patent No. 555864  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Edward F. Nemeth  
 ; APPLICANT: Edward M. Brown  
 ; APPLICANT: Steven C. Hebert  
 ; APPLICANT: Forrest H. Fuller  
 ; APPLICANT: James E. Garrett, Jr.  
 ; TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 ; NUMBER OF SEQUENCES: 20  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Lyon & Lyon  
 ; STREET: First Interstate World Center  
 ; STREET: Suite 4000  
 ; STREET: 633 West Fifth Street  
 ; CITY: Los Angeles  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 90071

COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTBQ

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/480,751  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/2117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993

APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/004  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 7:  
 Query Match Score 168.5; DB 2; Length 1078;  
 Best Local Similarity 30.3%; Pred. No. 2.6e-93;  
 Matches 269; Conservative 156; Mismatches 365; Indels 97; Gaps 26;  
 Query 12 WALL---IRPGAPLCSQQLRKGPGVYNGGFLPLG---EAEAGLRSRTRSSPVCTR 64  
 Db 8 WVLALTWHNTSAYGP---DORAOKRGDTIIGGLPPIHFGVAQKDDQLKS---RPSVECIR 62  
 Qy 65 FSSNQLLWALAMKQAVAEVNEINKSDLPSLPSRLGVLDFDCSEPVAMKSLMELA-KAGS 122  
 Db 63 YNFRGFRWQIQAIFIADIEINSPLLPHNLTGVRIFDCTNTVKALEATLTSFVAONKIDS 122  
 Qy 123 RDIAYCNYTQYQVRVLAVIGPHSSBLAMVTGKFSSFLPMLPQSYGASMEELISARETPS 182  
 Db 123 LNLDIFCNCSEHPISTIAVAGATSGSVVAVANLGLFVYIQPSYASSRSRLSNKOPKS 182  
 Qy 183 FFRTPSPSDEVQVLTAAELQOEGFNNWVALGSDEYQGQLSIFSLAALARGCIAHGL 242  
 Db 183 FLRTIPNDEHQATAMADLIEYFRNNWGTIAADDYDGRPGKPREEABERDIDCSEL 242  
 Qy 243 VPLFRADDSRLKGQDVHQNNSVQVNLFLASVHAAHALFVNSISSRLSPKVMASEA 302  
 Db 243 1---SQVSDEEETQHUVUVIQNINSTAKIVWESGSPDIEPLIKEIVRNNTGKWLSEA 298  
 Qy 303 WLTSDDLWGLPGMAQMGTVLGFQRGQAHREFQOV-KWTHLALATDPACFSALGERE--- 358  
 Db 299 WASSSLIAMPQYHVNGTGFALKAGQIPGFREFLKKVHPRKSVHNGFAKEFWETEINC 358  
 Qy 359 -----QSEEDDVQGRPQCD-----CITLONUSA-----GLNHO- 389  
 Db 359 HLGQGAKGPLVDTPLRQHES--GDRFSNSSTAFLPCTGDEDNISSEVTPYIDYTHRL 416  
 Qy 390 TPSYIAVSVQAQLHNTQC-----NASGCPAQDPKVQPKQOLLEMNYNLT-HVGGI 440  
 Db 417 SYNTYLAIVSIAHALQDIDTCLPGRLFTNGS-CADTKVVEAWQVQLHLHNFNNMG 475  
 Qy 441 PLRFDSGGNVMDMEYDLKLW--VWQGSVPRHLVGREN-GSLTERL---KIRWHTSD 491  
 Db 476 QVTDFECDGLVGNYSITINWHSPEGSIV-FKEVGYVNVYAKKERLFINNEKILWSGS 534  
 Qy 492 NOKPVVERCSRCRQEGQYR-VKGFRSCCYDVCDEASGSYRNPNDDFACTFCQGQDWSPER 550  
 Db 535 RBPFSNCSDRCLAGTRKIGEPTCCFECVCPDGEYSDETASACNCPDDFWSNEN 594  
 Qy 551 STRCFRRRSRLAWGPAVLLLISLALGIVLAALGLFVHRSPLVQASGGFLA--- 607  
 Db 595 HTSCIKEIEFLSWTEPFGIAILTFAVGLTFLAVGFLGFLKFRNTPIVKATRNLSYL 654

QY 608 CFGLVCLGLVCL-SVLLFGPGSPARCLAQQLSHLPLTGCLSTLQQAAE.FV- ESEL 664  
 TELEFAX: (213) 955-0440  
 Db 655 LFSLLC--- CPSSSLFFIGERPDWTCLRLRQAFGFSVLCSCILVKTRVLVFEAKI 710  
 INFORMATION FOR SEQ ID NO: 7:  
 QY 665 PLS---WADRLSGCLRGPGWAWLVLVLLMLYEAVALCTWYLAFPPSVEVTDMHMLPTEAL 719  
 SEQUENCE CHARACTERISTICS:  
 Db 711 PTSFHKRWGLNQ-----FLVFLCTEMOIVICVIVLYTAPPSSYRNQLEDEIF 762  
 LENGTH: 1078 amino acids  
 QY 720 VHCRTRSWWSGLAHATNATLFLCFLGTFLVRQSQPGCYNRARGLFLAMAYFITWVFV 779  
 Db 763 ITCHESGLMAGLFLGFGTCLAAICFFAKRSRKLPEENAKFTFSMLIFPIWISFI 822  
 MOLECULE TYPE: protein  
 Db 823 PAYASTYKFKVSAVEVIAILASFGLLACIFNKNKIIILFKPSRNTIE 870  
 TOPOLogy: linear  
 QY 824 PTSFHKRWGLNQ-----FLVFLCTEMOIVICVIVLYTAPPSSYRNQLEDEIF 762  
 Db 825 PAYASTYKFKVSAVEVIAILASFGLLACIFNKNKIIILFKPSRNTIE 870  
 MOLECULE TYPE: protein  
 US-08-943-986-7  
 RESULT 5  
 Sequence 7 Application US/08943986  
 Patent No. 5962314  
 GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 TITLE OF INVENTION: MOLECULES  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 CITY: Los Angeles  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PASTEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/943, 986  
 FILING DATE: 03-OCT-1997  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484, 565  
 FILING DATE: 7-JUNE-1995  
 APPLICATION NUMBER: 08/353, 784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292, 827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141, 248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009, 389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017, 127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934, 161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834, 044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749, 451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38, 179  
 TELECOMMUNICATION INFORMATION:  
 QY 720 VHCRTRSWWSGLAHATNATLFLCFLGTFLVRQSQPGCYNRARGLFLAMAYFITWVFV 779  
 Db 765 PLS---WADRLSGCLRGPGWAWLVLVLLMLYEAVALCTWYLAFPPSVEVTDMHMLPTEAL 719  
 Db 771 PTSFHKRWGLNQ-----FLVFLCTEMOIVICVIVLYTAPPSSYRNQLEDEIF 762  
 Db 772 VHCRTRSWWSGLAHATNATLFLCFLGTFLVRQSQPGCYNRARGLFLAMAYFITWVFV 779  
 Db 763 ITCHESGLMAGLFLGFGTCLAAICFFAKRSRKLPEENAKFTFSMLIFPIWISFI 822  
 Db 780 PILANOVVLRAVOMGALLCULVILAAFLPLFRCYLMLRQPLGNTPE 822

RESULT 6 US-08-353-784-7  
Sequence 7, Application US/08353784  
Patent No. 6,011,068  
GENERAL INFORMATION:  
APPLICANT: Edward F. Nemeth, Edward M.  
APPLICANT: Bradford C. Van Wagenen, Manuel  
APPLICANT: F. Balandin, Forrest H. Fuller,  
APPLICANT: Eric G. Delmar, and Scott T. Moe  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQ  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/353, 784  
FILING DATE: 9 December, 1994  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 8  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/1292, 827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141, 248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009, 389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017, 127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934, 161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834, 044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749, 451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Haber, Sheldon O.  
REGISTRATION NUMBER: 38, 179  
REFERENCE/DOCKET NUMBER: 209/069  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1078 amino acids  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-353-784-7  
RESULT 7 US-08-484-719B-7  
Sequence 7, Application US/08484719B  
Patent No. 6,031,003  
GENERAL INFORMATION:  
APPLICANT: Edward F. Nemeth, Edward M.  
APPLICANT: Bradford C. Van Wagenen,  
APPLICANT: F. Balandin, Forrest H. Fuller,  
APPLICANT: Manuel F. Balandin, Eric G.  
APPLICANT: Forrest H. Fuller, Eric G.  
12 WALL---HPTGATLCLSOOLRGMGDYVIGGLPFLG---EAEAGLRSRTRPSPVCTR 64  
QY 123 RDIAYCNVYQOPVLAVIGPHSELAMVIGKFFSFLMPQVSIGASMBLSSARBTFS 182  
Db 123 LNLDIFCNSHEHPTLAVGATSGVSTAVANLJGFLYRQVSASSPLSNSNQFS 182  
QY 183 FPTWPSDRVTLAABBLQEFGRNVAALGSDBYGROCLTSFSLAARGLCTAHGL 242  
Db 183 FLRTIPNDHQATANADIBYFRMWGTTAADDYGRPGIEKEFREABERDICIDPSL 242  
QY 243 VPLRADDRLGKQDVLHQNQSVVQVLLAFLASHAHAHLNISISSRSPKWNASE 302  
Db 243 T---SOYDDEEELIOHUVVETVONSTAKVTVFSPSGDPLIKEVVRNITGKTLASEA 298  
QY 303 WLTSDLVWGLPQMAOMGTVLGLORGALQHEFPQV-KTHLALATDPAFCSALGRE--- 358  
Db 299 WASSSLIAMQQYHVGCTGFLAKGQFGRERELKVKRKSHTGFAKXEFETNC 358  
QY 359 -----OGLBDEVYGRCPQCD----CITLQVSA----GLNHHQ- 389  
Db 359 HLOEGAKGGLPVLVDTFLRGHBS---GDRFSNSTAFLPRLCTGQDENTISSVTPPYDTHLRI 416  
QY 390 TESTVAAVTSVVAQQLNHTQ-----NASGPAQDPVVKPQMLLNMLTF-HVGLL 440  
Db 417 SYNVLAIVSIAHALQDVTYCLPGRLFTNGS-CADIKKVEAVWQVQLKHLRHNFTNMG 475  
QY 441 PLRFDSSGNVIMEDDLKLW---WVQGSVRLHDVGRFN-GSLRTERL---KRWHTSD 491  
Db 476 QYTEDBGLWGNISLNLHPSLPGTV-FKEQYVNTYAKKGBRLPINEKLWGES 534  
QY 492 NQKPVSRCSRCQRCQSGQVR - VKGHFHSICVDVDCBAGSYRNQPDIACTFGQDWSPER 550  
Db 535 REVPSNCSRDCDLAGTRKGTELEGPTCCFECVECPDGESEDDTADASACKCPDDFWSEN 594  
QY 551 STRFRRSRFLANGEPAVILLIUSLALGVLIALGIVFHRSPLVQASGGELA--- 607  
Db 595 HTSCTIAKELEFLSWTEPFGTLTFLAVGIGFLTAFLVGLVPTKFRNTPVTKATNRBLSYLL 654  
QY 608 CFGLVCLGLVCL-SVLLPQOQPSPARCLAQQLPLSHLPLTCCLSTIFLQABEFLV--ESEL 664  
Db 655 LPSLIC---CFSSLFFGEPOWTCLRQAPGQFCLISCLVKTNRVLLVEAKI 710  
QY 665 PLS---WADRISGCLRGTPWVLLVLLMLVEALCTWLVLAFAPEPVWTDWMLPTEAL 719  
Db 711 PTSFHKWKGWLNLQ-----FLVFLCTFMQIVCIVWLYTAPPSSYRNOELEEIF 762  
QY 720 WCHCTRSWMSFGLAHATNATLAFLGLFLVRSQPGCTINRARGUTFAMILYAYFTWUSV 779  
Db 763 TCHGSLMAGLFLGIFTYCLAAICFFPAFKSKRKLUNENFAKEFTSMILFFIVWISPI 822  
QY 780 PILLANQVVLRAVONGALLICLVLVIGLIAFLPHRLPCYLLMRQGLNTP 827  
Db 823 PAYASTYGRKESAVEVIALAASFLGACTPFNKYVILFKPSRNTIE 870

TITLE OF INVENTION: MOLECULES  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3 1/2" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: MS Word  
 SOFTWARE: FastaSeq for Windows Version 3.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484,719B  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 514  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/392,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/634,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Douglas C. Mardock  
 REFERENCE/DOCKET NUMBER: 213/007  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510  
 TELERX: 67-484-719B-7.  
 INFORMATION FOR SEQ ID NO: 7:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1078 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 QUERY Match 23.6%; Score 1068.5; DB 3; length 1078;  
 best Local Similarity 30.3%; Pred. No. 2.6e-93; Indels 97; Gaps 26;  
 matches 269; Conservative 156; Mismatches 366;  
 12 WALL---HPGTGAFLCISQQLRNKGDDVGGFLPGL---EAEFGAAGRTRSSPVCTR 64  
 8 WLLALTTWHTSAYGP---DORAQKGKDILGGIPRGAQKODLKS-RFBSVECIR 62  
 65 FSSNGLLVALAMKQAVBNSKNDLPLGRLGFLDFCSEPVWAKMSKIMFLA-KAGS 122  
 63 YMERGFRMQLQAMFAIEENNSPALLPNITLGRIFDTONTVKALEATLISFYAQNKIDS 122  
 123 RDLAAYCNYTQKQPRVLAVIGPHSELAVNTGKFSPFLMPQSYGASHMELLSARETFPS 182  
 123 LNLDEFNCNSEHIFPSTIANGATCAGSGVSTAVANLIGFLYIPOSYASSRLSNKNGRS 182  
 183 FFRTVPSDRVQLTAAEELQEGFNNVAALGSDDEBYGRGQLSFSALAMARGICIAHGGI 242

RESULT 8  
 US-08-484-159-7  
 Sequence 7, Application US/08484159  
 Patent No. 631346  
 GENERAL INFORMATION:  
 APPLICANT: Bradford C. Van Wagenen  
 APPLICANT: Manuel F. Balandrin  
 APPLICANT: Eric G. Del Mar  
 APPLICANT: Edward F. Nemeth  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3 1/2" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

Db FLRTIPNDEHQATAMADIEYFRWNWVGTIAADDYGRPGIEKFREEEARDICIDFSEL 242  
 Qy 183 VFLPRADSRSLUGKVQDVLHQVNQSSVQVULLFASVHAAHALFVNYSISSLSPKWMVSEA 302  
 Db 243 I----SQYSDDEBEBIQTVEVIONYSTAKVIVVPUSSGPDPLEPLIKEIVRRNITKGWILSEA 298  
 Qy 303 WIJLSDMGLPGMAQMGTVLGLLQRGQHHERPQVYKTHLALATDPAFCASLGRE--- 358  
 Db 299 WASSSLIAMPQVFHVWVGTTGALKAQIPIGRERFLKVKHPRKSVHNGFAKEFWETFNC 358  
 Qy 359 -----OGLLEDVWVGQRCPCQCD-----CITLQNSA-----GLNHHO- 389  
 Db 359 HLOBGAKGKPLPVDTFLRGHEES---GDRFSNSSTAFLPCTGDNEDNISSVETPTIDYHLRI 416  
 Qy 390 TFSVYVAVYVSYVQALAHNLQC-----NASGCPAQDPVKWQWOLEMMYNTF-HYGG 440  
 Db 417 SYNVYLAIVYSTIAHALOPIYTCLPGRLFTNGS-CADTKVVEAWQVLKHLRHLNFTNNGE 475  
 Qy 441 PLRDPSSGGNVMDYDLKLW--WVQGSVPRLHDVGRNN-GSLTER-----KIRWHTSD 491  
 Db 476 QTFVFDGGDVLGVNYSITINWHLSPEDGSSIV-FKEVGVYVWVAKGERFLPINEEKILWSFS 534  
 Qy 492 NOKPVRSRCSRQCOEGQYTER-VKGFCFHSCCYDVCYDCEASYSYRNQFDDIACTFCFGODBWSPER 550  
 Db 535 REVPPFSNCNSRDCLAGTRKGIEBPTCCFECVCPDGEYSDETDASACNKCPCDDFWNSEN 594  
 Qy 551 STRCFRRRSRLFAWGEPAVLLILLSLALGVLGAFLGVHFRDSDPLVQASGGPLA--- 607  
 Db 595 HTRSCIKEIEFLSWTEPPGIALTFLAVIGLIFTPLVQFLVQFLKPRNTPKATNRELPSYL 654  
 Qy 608 CPGFLIVCIGLIVCL-SVLLPGSPARCLAQAOPLSHLPLTGICSTLFLQAEATFV---ESEL 664  
 Db 655 LFSLIC---CSSLLEFIGEQDWTQRLRQAFGFSVLCISCLVKTNRVLFVFEAKI 710  
 Qy 665 PLS---WADRLSGCILRGWPWAWLVLVILMLVVALCTWYLVAPPPEVTDWHLMLPTAL 719  
 Db 711 PTSFHKRWKGMLNQ-----FLVFLCTEMQIVICIVIWTAPPSSYRNQBLEDETF 762  
 Qy 720 VHCRTRSWWSFELAHATNATLFLCEGFTLRSQCGCYNRARGLTAMLAFLTWTWSFV 779  
 Db 763 ITCHESSMLAFLGFLIGYTCLLAAICFFPAFKSRKLPLNPEAKFTPSMLFLIWIWSFI 822  
 Qy 780 PILLANQVVLRAVQMGALLCULVGLGIAFLPHPRCYLMLRQGNTPE 827  
 Db 823 PAYASTYVGKFVSAVEVIAFLASFGFLIACIFENKIVYLFKSRSNTE 870



APPLICATION NUMBER: U.S. 08/141, 248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009, 389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017, 127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934, 161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834, 044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749, 451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38, 179  
 PREFERENCE/DECET NUMBER: 23/3/005  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 5:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1085 amino acids  
 TYPE: amino acid  
 MOLECULE TYPE: protein  
 US-08-485-588-5

Quarry Match 23.4%; Score 1060; DB 1; Length 1085;  
 Best Local Similarity 30.0%; Prey. No. 1.8e-92; Mismatches 269; Conservative 155; Indels 112; Gaps 26;  
 Matches 362; Name: Heber, Sheldon O.  
 Qy 6 VIGLISLWALLHMGPGTGAPELCLSQQLRMKGDDYVGGGLPPL--GPA-ERAGLRSRTRPSSPVC 62  
 Db 10 LIAFSTWCTSAVGP-----DPAQKKGDDIILGGLPPIHCFCAVQDKDLKS--RPESEVC 61  
 Qy 63 TRFSSNGLLWALAMKMAVEEINNSDLPGLPGLRGLYDPLDTCSEPVAMKPSLMLPA-KA 120  
 Db 62 TRYNEPRGRPMIQLAMIFAEETINSPALLPNMNLGYIFDNTVSKALEATLSPVANQKI 121  
 Qy 121 GSRDIAYCNYTOQYQPRVLAUTGPHSSBLAMVTKFSSFLMPQVYGAWSHLLARETF 180  
 Db 122 DSNLJLBFNCNSEHTISTIAVUGATGSGISAVANILGLFLYIPQVSYASSRSLSKNQF 181  
 Qy 181 PSFRRTVPSDVRVOLTAELQEBFGHNNVALLGSDPEYGRGCLTSISALAAARGCTIAHE 240  
 Db 182 KSLRRTIPNDRQATAMADIEYFRMWVGTIAADDYGRGIEKFREEABERDICIDFS 241  
 Qy 241 GIVUPLRRADDRLKGKVQDPLRQVNGQSVQVULFASVHAAHALFNVNISSSRLSPKWWAS 300  
 Db 242 ELI---SOYSDBEKIQVQVNVTONSTAKVTVFSSGPDLPELIKETVRNNTGRILWAS 297  
 Qy 301 EAWLTSPLVMGGLPMAQMGTVLGFGLPQAOQJEBFPQV-KTHLALATDPATCSAL--- 354  
 Db 298 EAWASSSLIANPPEYFHVGCGKUKAQGPQFREPLQKHPKRSVHNGAKEFVEETP 357  
 Qy 355 -----GRBEOGL-----BEDUVGQRCQCDCTLQ 380  
 Db 358 NCHLQBGAKGPLPVDTLRLGRBEGGARLNSPTAFRPLCTGEEBNENISVETPYMDYTHLR- 416  
 Qy 381 VSAGLNHHQTSVYAAVTSVQALHNLQC-----NAGCPADPVPKQWLENMNY 432  
 Db 417 -----ISVNVLYAVTYSIAHALOYTCIPGRGLPTNGS-CADITKVEAWQVQLHLH 467  
 Qy 433 LTPHVG-GLPRLPDSQNVMDMEYDLKLW--WVQGSVPRLHDVGRN-GSSTERL--- 483  
 Db 468 LNFTSNGEOTFDECGDLAGNYSINWHPEDSIV-FKEVGVNVYAKKGERLFIND 526  
 Qy 484 -KIRWHTSDNQKPVSRCSROQOBGQRR-VKGPHSCYCDCTCEAGCSYRQNPDDACTFC 541  
 Db 527 EKLMWSGFSRSVPPFSNCSDCLAGTRKGIIIGEPTCCFECVPDGEYSBTDASACDK 586  
 Qy 542 QDDENSPERSTRCRRRSRFLLAWGEPAVLLILLISLALGLVLAALGLFVHFRDSPLVQA 601

RESULT 10  
 US-08-484-565-5  
 ; Sequence 5, Application US/08484565  
 ; Parent No. 5763569  
 GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484, 565  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIORITY APPLICATION DATA:  
 PRIORITY APPLICATION DATA: including application  
 PRIORITY APPLICATION DATA: described below: 9  
 APPLICATION NUMBER: 08/353, 784  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292, 827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141, 248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009, 389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017, 127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934, 161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834, 044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749, 451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38, 179

```

REFERENCE/DOCKET NUMBER: 213/006
; ; TELECOMMUNICATION INFORMATION:
; ; TELEPHONE: (213) 485-1600
; ; TELEFAX: (213) 955-0440
; ; TELER: 67-3510
; ; INFORMATION FOR SEQ ID NO: 5:
; ; SEQUENCE CHARACTERISTICS:
; ; LENGTH: 1085 amino acids
; ; TYPE: amino acid
; ; TOPOLOGY: linear
; ; MOLECULE TYPE: protein
; ; US-08-484-565-5

Query Match 23.4%; Score 1
Best Local Similarity 30.0%; Pred. N
Matches 269; Conservative 155; Mism
Matches 269; Conservative 155; Mism
QY 6 VIGLSLWALLHHPGPGAPLCLSQQLMKMK
QY 10 LLAFLSTWCITSAYGP-----DORAKKKK
Db 63 TRASSNGLIWALEMAMMVAEIRNNKSLD
Db 62 IRTNFRGFFRLQAMTFAIECINSSAALL
QY 121 GSRDIAXKCNYQVQPRVLAVIGVPHSS
QY 122 DSIINLDFCNCSEHIPSITLAVGATGSS
QY 181 PSFRRTVISDRVQTLAAEILQEFFFNN
QY 182 KSFRLRTIPRDEHQATAMALIEYFRWWN
QY 241 GLVPLPRAADSRLCKQVQDVLHQVNQSS
QY 242 ELI---SQQSDEEKKIQQVVEVIONST
Db 301 EANLTSUWGLPGMAQMGTQVGLFLQROR
QY 298 EAWASSSLIAMPBEYFHVGSGTIGFCGKLL
Db 355 -----
QY 358 NCHLQEGAKGKGPLPVDTPLRGHEEGGARR
QY 381 VSAGLNHHOTPSVYAVAVSYAQLAINTT
Db 417 -----ISYNVILAVYSTAHALDDI
QY 433 LTFHVG-G-GLPLRFPSSGNVYDMEYDQLKL
QY 468 LNFITSNMGEQVTFBCGDLAGNYSINT
Db 484 KIRWHTSDNQKPYRSRCSRQCOEGQYRR
QY 527 EKILWSGSREVPPNSCSDRCLAGTRKKK
QY 542 GDEBWSPERSTRCRRRSRFLAWGPPA
Db 587 PDDFWNSNEHTSCTAKEIELTSWTPPP
QY 602 SGGPLA--CFGGLYCLGGLC--SVLFLP
QY 647 TNRELTSYLLFLSLC---CPSSSIFF
Db 658 IFV--ESEPLS---WADRISGLRRLQ-
QY 703 VLVLFPEAKITPSFHKKWGLNLTQ-
QY 711 WHMLPTEAL-VHCRTRSWISFLGAWHATT
Db 755 -HLDDEIIPITCHEGSMLAFLGFLGYY

```

RESULT 11  
US-08-480-751-5  
Sequence 5, Application US/08480751  
; Patient No. 585884  
; GENERAL INFORMATION:  
; APPLICANT: Edward F. Nemeth  
; APPLICANT: Edward M. Brown  
; APPLICANT: Steven C. Hebert  
; APPLICANT: Forrest H. Fuller  
; APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PASTSEQ  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480, 751  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
PRIORITY APPLICATION DATA: including application  
PRIORITY APPLICATION DATA: described below: 9  
APPLICATION NUMBER: 08/153-784  
FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292, 827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009, 389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017, 127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934, 161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834, 044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749, 451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE DOCKET NUMBER: 213/2004  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 499-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1085 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-480-751-5



MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/353,784  
 FILING DATE: 9 December, 1994  
 CLASSIFICATION: 514  
 PRIORITY APPLICATION DATA: including application  
 PRIORITY APPLICATION NUMBER: PCT/US/94/12117  
 PRIORITY APPLICATION DATA: described below: 8

FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/411,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,151  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 209/069  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 5:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1085 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein

US-08-353-784-5

Query Match 23.4%; Score 1060; DB 3; Length 1085;  
 Best Local Similarity 30.0%; Pred. No. 1,8e-92;  
 Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

Db 770 AYFIVTUVFVULLANYQWVPRPAVONGALICVUGLAATHPLPCTYLMRQGQPLNTP 827

Db 814 IFFIVWISFIDRAYASTYQKFVSAVETIAILASFGILACTFRNKVYIILKPSRNTIE 871

RESULT 13

US-08-353-784-5

Sequence 5, Application US/08353784  
 Patent No. 601068

GENERAL INFORMATION:

APPLICANT: Edward F. Nemeth, Edward M.  
 APPLICANT: Brown, Steven C. Hebert,  
 APPLICANT: Bradford C. Van Wagenen, Manuel  
 APPLICANT: P. Balandrin, Forrest H. Fuller,  
 APPLICANT: Eric G. Delmar, and Scott T. Moe  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071

COMPUTER READABLE FORM:

QY 181 PSFRTVPSDVRQVLTAAELIQBFGNNWVAAALGSDEYGRGQLSIFSLAARGICIAHE 240  
 QY 182 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 241 GLVPLRRAODSRGKQVDPVQVWVQVNSVQVLFASVHAHALFNYSISSRSPKVNWS 300  
 QY 242 ELI---SQYSDEBKIQVQVENVIONSTAKVIVFVSGPDLEPLIKEVRRNITGRILAS 297  
 Db 301 EAWLTSVLVGLPMAQVTLGLQRAQHLFQVY-KTHLALATDPACSL--- 354  
 QY 358 NCHLQBGAKGKGLPVDTFLRGHEGGARLSNSPTAFLPLCTOEGENTSSEVTPYMDYHLR- 416  
 QY 381 VSAGLHHOTPSVYAVVSVQALENTLOC-----NAGGCQDQDPUKPVQWLLENMVN 432  
 QY 417 -----ISVNVVLAIVSYINAHQDLYTCIPIGRGLFTNGS-CADTKVQEWQVQLHLRH 467  
 Db 433 LTFHVG-GLPRLFDSGNVMDMYDILW--WVQGSVPLRDGVFN-GLSLTEI--- 483  
 QY 468 LNFTSNNGEQTFDBEGGLACNYSINWHLSPEDDIN-SIV-EFEGVGNVYKKGEBLIND 526  
 Db 484 -KIRWHITSNDNOKPVSRCSRQOCQEGQVRR-VVGFHSCYCDUCDEAGSYRONPDDIACTFC 541  
 QY 527 EKLMGFSRSRVPFSNCSDQCLAGTRKGJIEGEPTCCFECVCPGEBYSETDASACKC 586  
 QY 542 QDENSPERSTRCRFRRSRFLAWGERAVULLLISLALGHVLAALGLFVHHRDPLVQA 601  
 Db 587 PDDFWSNENHTSCIAKIEBIEFLSWTEPPGIAITLFAVLGIFTAVLGVFKVIFKRNIPIVKA 646  
 QY 602 SGGPGLA---CGLVCLGLVCL-SVLLPGQSPARCLAOPLSHIPLTGCLSTLQAE 657  
 Db 647 TNRELSYLILSILC---CFSLSLPIGEQDWTCLRQAFGSLVQCLVKTNR 702  
 QY 658 IFV--BSELPS---WADRSLGCLRGPMWVLUVLAJMLVEALCTWLVAFPPEVTD 710  
 Db 703 VLVLFEEKIPPSFRKQWGLNQ-----FLVPLCTMNOVICAINTTAPPSYR 754  
 QY 711 WHMLPTEAL-VHCRTRSWVSEGLAHATNATIAFLCFLGTFLVRSSQPGCYNRARGHTFAML 769  
 Db 755 -HELEDEIIFITCHEGSLMALGFLIGTYCLLAAICFFAFKSKRKLUPENFNEAKIFITSM 813  
 QY 770 AYFIVTUVFVULLANYQWVPRPAVONGALICVUGLAATHPLPCTYLMRQGQPLNTP 827  
 Db 814 IFFIVWISFIDRAYASTYQKFVSAVETIAILASFGILACTFRNKVYIILKPSRNTIE 871

US-08-353-784-5

Query Match 23.4%; Score 1060; DB 3; Length 1085;  
 Best Local Similarity 30.0%; Pred. No. 1,8e-92;  
 Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

Db 63 TRESSNGLWALANKMAYEINNKSDLPGRLGIRGQDUDTCSPVWANKPSLWFLA-KA 120  
 QY 64 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 65 IRVFLRGRFLQAMIFALBEINNSPAPLNPMTGIRIDTCNTVSKAELATISPVQAONKI 121  
 QY 66 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 67 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 68 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 69 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 70 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 71 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 72 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 73 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 74 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 75 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 76 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 77 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 78 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 79 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 80 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 81 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 82 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 83 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 84 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 85 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 86 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 87 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 88 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 89 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 90 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 91 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 92 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 93 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 94 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 95 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 96 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 97 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 98 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 99 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 100 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 101 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 102 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 103 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 104 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 105 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 106 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 107 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 108 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 109 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 110 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 111 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 112 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 113 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 114 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 115 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 116 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 117 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 118 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 119 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 120 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 121 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 122 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 123 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 124 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 125 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 126 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 127 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 128 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 129 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 130 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 131 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 132 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 133 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 134 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 135 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 136 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 137 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 138 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 139 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 140 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 141 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 142 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 143 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 144 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 145 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 146 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 147 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 148 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 149 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 150 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 151 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 152 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 153 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 154 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 155 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 156 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 157 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 158 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 159 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 160 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 161 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 162 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 163 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 164 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 165 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 166 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 167 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 168 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 169 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 170 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 171 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 172 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 173 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 174 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 175 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 176 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 177 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 178 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 179 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 180 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 181 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 182 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 183 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 184 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 185 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 186 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 187 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 188 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 189 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 190 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 191 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 192 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 193 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 194 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 195 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 196 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 197 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 198 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 199 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 200 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 201 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 202 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 203 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 204 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 205 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 206 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 207 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 208 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 209 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 210 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 211 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 212 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 213 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 214 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 215 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 216 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 217 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 218 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 219 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 220 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 221 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 222 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 223 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 224 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 225 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 226 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 227 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 228 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 229 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 230 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 231 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 232 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 233 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 234 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 235 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 236 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 237 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 238 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 239 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 240 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 241 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 242 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 243 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 244 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 245 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 246 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 247 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 248 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 249 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 250 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 251 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 252 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 253 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 254 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 255 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 256 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 257 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 258 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 259 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 260 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 261 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 262 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 263 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 264 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 265 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 266 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 267 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 268 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 269 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 270 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 271 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 272 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 273 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 274 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 275 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 276 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 277 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 278 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 279 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 280 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 281 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 282 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 283 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 284 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 285 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 286 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 287 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 288 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 289 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 290 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 291 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 QY 292 KSFRTIPNDHEQATAMADIEYFRNWVGTIAADDYGRGIEKPREERDICIDS 241  
 Db 2



QY 542 QODWSPERSTRCFRRRSRFLANGEPAVVLILLISLALGIVLAALGLFVHRSPLVQA 601

Db 587 PDDFNSNENHTSCTIAKEIEFISWTEFFGIAITLFAVLGIFTAFLVGFVFKFRNPIVKA 646

QY 602 SGGPLA--CFLGVLGLVCL-SVLLFCQPSPARCLAOQPLSHPLTGTSLTFLQAE 657

Db 647 TNRELSYLLFSLLC---CSSSLFFIGEPDWTORLROAFAFGISFVLCISCLVKTNR 702

QY 658 IFV--ESELPLS----WADRLSCLRGWPWVLLVLLMLVEALCTWVLAFAPEVWT 710

Db 703 VLVFVKIPSFRKWMGLNQ-----FLLVFLCTENQIVICATWLNTPASSRN 754

RESULT 15  
US-08-484-159-5Sequence 5, Application US/08484159  
Patent No. 6313146GENERAL INFORMATION:  
APPLICANT: Bradford C. Van Wagenen

APPLICANT: Manuel F. Balandrin

APPLICANT: Eric G. Del Mar

APPLICANT: Edward F. Nemeth

TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES

NUMBER OF SEQUENCES: 20

CORRESPONDENCE ADDRESS:  
ADDRESSE: Lyon & LyonSTREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth StreetCITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQCURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,159  
FILING DATE: 7 June, 1995CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application

PRIOR APPLICATION DATA: described below: 9

APPLICATION NUMBER: 08/353,784  
FILING DATE: 9 December, 1994APPLICATION NUMBER: PCT/US94/12117  
FILING DATE: 21 October, 1994APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991

ATTORNEY/AGENT INFORMATION:

NAME: Heber, Sheldon O.

REGISTRATION NUMBER: 38,179

REFERENCE/DOCKET NUMBER: 214/101

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 482-1600

TELEX: 67-3510

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 1085 amino acids

TYPE: amino acid

TOPOLOGY: Linear

MOLECULE TYPE: protein

US-08-484-159-5

Query Match 23.4%; Score 1060; DB 4; Length 1085;

Best Local Similarity 30.0%; Pred. No. 1; 8e-92; Mismatches 362; Indels 112; Gaps 26;

Matches 269; Conservative 155; MisMatches 362; Indels 112; Gaps 26;

6 VLGSLIWALLHPGTCAPLCLISQQLRMKDPYVLGGLFLP--GEA-EAAGLSRTRPSSVC 62

Db 10 LLAFTSTWCTISAYGP----DORAQKQGDPILGGLPPIHFGAVAKDQLKS--RPESVBC 61

QY 63 TRFSNGLLWALAKOMAVERINNSDILGIGRIGDIDTCSEBVWAKKPSLMLPA--KA 120

Db 62 IRYNFRFRMLQAMIFATRERINSPALPNTMIGYRIFRDTCNTVSKALEATLSFVAQK1 121

QY 121 GSDRTAAKYNTQVOPRNLVAVIGPQHSSLLAMNTOKPFSSFLMPOVSQKAGSMELLARPTF 180

Db 122 DSNLIDFCNCSEIIPSTAVGATGSGJSTAVANLILFVYIPOVSYSSRSLNSNQF 181

QY 181 PSFFRTVPSDVRQVLAELBLLQERGWNNAALGSDDENGRQGJSIFSALAARGCIAHE 240

Db 182 KSFRTIPADBEHQATAMADIEYFRWNWGTIAADDYGRPGEBKFRREABERDICIIFS 241

QY 241 GLVLPPLRADSRLQKVDLHQVNOSSQWVLFASVIAHALFNYSRSPKUWAS 300

Db 242 ELI---SOVSDEEKKIQVNEVIONSTAKVIVVFFSGDPLEPLIKEVTRRNITGRWILAS 297

QY 301 RAWLTSDDLWGLPQMAQKTVGLQRLQRQVQHSPQVY-KTHLALATPAPCSAL--- 354

Db 298 EAWSASSLAMPETYFHVGFTGIGKQGQIPGRREFIQLQVPRKSVHNGFAKEFWBETP 357

QY 355 -----GEREQL-----EDVVGRCPOCDITQN 380

Db 358 NCHLOEGAKOPLPVDTFLRGHEEGARLNSNPTAFRPLCTGEENISSVETPYDTHR- 416

QY 381 VSAGLNHHOTFSVYAVVSEVAQALHNTIQC-----NASGCPAQDPVKPWOLLENNY 432

Db 417 -----ISYNVVLAVYSAJHALQDITVTCIPGRGLFTNGS-CADIKUVEAWOVLKHHR 467

QY 433 LTFHVG-GPLRFSSGIVMDVYEQKLUK-----VMOGSVRLHDGRFN-GSLRERL--- 483

Db 468 LNFTSNMGBQVTBEGCGLAGNYSINWHLSPEDSVI-FKEYGYYNTYAKKGERBLFIND 526

QY 484 -KIRVHTSONQKPVSRCSRCQEQVRR VKGEHISCCDVCDVDEBASGRVQRNPDDIATFC 541

Db 527 EKLUWSGFREVPNSCSRDCLAGTRKJIEGBTCCRECVEPDPGEVSDETDASACKC 586

QY 542 QODWSPERSTRCFRRRSRFLANGEPAVVLILLISLALGIVLAALGLFVHRSPLVQA 601

Db 587 PDDFNSNENHTSCTIAKEIEFISWTEFFGIAITLFAVLGIFTAFLVGFVFKFRNPIVKA 646

QY 602 SGGPLA--CFLGVLGLVCL-SVLLFCQPSPARCLAOQPLSHPLTGTSLTFLQAE 657

Db 647 TNRELSYLLFSLLC---CFSSLFFIGEPDWTORLROAFAFGISFVLCISCLVKTNR 702

QY 658 IFV--ESELPLS----WADRLSCLRGWPWVLLVLLMLVEALCTWVLAFAPEVWT 710

Db 703 VLVFVKIPSFRKWMGLNQ-----FLLVFLCTENQIVICATWLNTPASSRN 754

QY 711 WHMLPTEAL-VHCRTRSWFVGLAHATNATLAFCLPLGTLPLVRSOPGCVNRGLTFAML 769

Search completed: May 11, 2004, 15:30:34  
Job time : 22.1574 SECs

**THIS PAGE BLANK (USPTO)**